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A PUBLIC CHOICE ANALYSIS OF TOBACCO LEGISLATION AND LITIGATION

By

Jeffrey E. Haymond
A Thesis
Submitted to the
Graduate Faculty
Of
George Mason University
In Partial fulfillment of
The Requirements for the Degree
Of
Doctor of Philosophy

Economics

Fairfax, VA

A Public Choice Analysis of Tobacco Legislation and Litigation

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts at George Mason University

By

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ABSTRACT

A PUBLIC CHOICE ANALYSIS OF TOBACCO LEGISLATION AND LITIGATION

Jeffrey E. Haymond, Ph.D.

George Mason University, 2001

Thesis Director: Dr. Richard E. Wagner

This thesis examines the public choice issues surrounding the ongoing tobacco controversy. From a standard public interest story, the arguments against tobacco suggest the need for a total ban of the product; yet that was never seriously proposed. Thus this thesis seeks to apply public choice principles in search of a more realistic understanding of the actions surrounding tobacco. Various public choice principles are analyzed including interest group behavior, bureaucracy, and rent seeking. However, the rent extraction model of political extortion was examined in depth, and tested empirically using event study methodology. Using stock market data from 1997 and 1998, during the period of the national tobacco settlement discussions, the author found the evidence supported the rent extraction theory: wealth was extracted in exchange for no action against the industry. This model of political extortion can be extended to assess the role of the class action lawsuit: is it a tool of legal extortion? One interesting aspect of class action lawsuits is the high percentage that do not go to trial, but are settled out of court. This is especially true for securities class action lawsuits. The author gathered data on

thirty securities class action lawsuits, and performed event studies to assess the validity of extending the rent extraction model to legal extortion. The data strongly supported this extension. One could look at the actions surrounding the tobacco issue as simply changing claims to the property rights of the tobacco industry and smokers. The author examined several theories of property rights and the process of change. A historical review of tobacco-related actions was undertaken, with the analysis supporting the proposition that changing property rights occur as a process of conflict over scarcity, with public opinion changes leading political entrepreneurs to force change in existing property rights structures.

Chapter One Introduction

One of the most contentious political issues in recent years has been tobacco, especially the use of this product in public areas. It is now illegal to smoke in public establishments in California, and more states are considering further limitations. Many politicians have publicly vilified an industry which sells a legal product. Mississippi's Attorney General Mike Moore calls the industry a "conspiracy" which uses "propaganda" to further its "hidden agenda." He labels industry defenses of its business as "ghoulish...offensive to human decency, an affront to justice, and uncharacteristic of civilized society" (Moore, pp. 192-203). On the federal level, the same administration whose Surgeon General suggested legalizing drugs was at the forefront of drastic restrictions on the use of a lawful product, mostly through sharply higher taxes. The public rationale for actions against tobacco has been the cost of treatment of tobacco-related illnesses which has been shifted to the taxpayers through government medical programs.

Indeed, the states' lawsuits which ultimately led to the Master Settlement
Agreement in 1998 were explicitly brought to recover Medicaid costs of treating
smoking-related illnesses (Frohlich, p. 445). As Moore himself says, the purpose of the
lawsuit was to "relieve the heavy financial burden on state treasuries" (Moore, p. 192).
He is not suggesting that there aren't higher costs associated with tobacco (such as the

immense health costs borne by smokers themselves), but simply that the state's interest was recovering the cost of treating smokers. Moore states:

"The state is acting not as a surrogate of the tens of thousands of individual smokers whose health care bills it has had to pay, and it is not suing to recover anything for individual smoking victims. The State is suing in its own right to protect its interests and to recoup funds which will also inure to the benefit of the federal government. The suit's premise: unlike the smoker who had an illusory "choice" to smoke, the State had no choice in providing health care to its citizens suffering from tobaccorelated illnesses who relied on the State for their care. (Moore, p. 195)

Of course, Moore suggests that an overall economic cost/benefit analysis is inappropriate, and "the State is resisting the industry's effort to make economic "benefits" an issue in the case and has sought an order from the Court disallowing the discovery and prohibiting the industry from offering any such evidence at trial" (Moore, p. 197). It serves the state well to take such a stance, since every comprehensive analysis of the costs and benefits of tobacco to government agencies suggests that tobacco consumption more than pays for itself through existing taxes (Wagner, p. 2). As Annas notes in The New England Journal of Medicine,

"Of the smokers who die of smoking-related illnesses, most do not die until after they become eligible for Medicare. Thus, the cost of their final illness (other than long-term care expenses) is likely to be borne not by the city or the state, but by the federal government. Moreover, to the extent that the individual smoker dies earlier than he or she would otherwise have died, the federal government may even get a net savings (emphasis added) from Social Security and Medicare—and also from Medicaid, which pays for nursing home care for nonsmokers who live longer than smokers. The extent to which federal financial burdens and benefits should be factored into state-level judgments, or whether the federal government should itself be a party to these cases, remains to be determined (p. 2)."

Viscusi is not nearly so cautious; his analysis suggests that not only does Mississippi reap "a profit of \$0.21 per pack from cigarettes" (p. 32), but that "cigarettes save the states

money in every state" (p. 27). Krauss suggests that the cost increases imposed as part of the Master Settlement Agreement had no bearing to the costs imposed on society by cigarettes, but rather were the maximum that could be imposed on consumers and leave cigarette consumption at the level both states and the industry support (p. 26).

Other criticisms of tobacco stress the human costs: it is claimed that 400,000 people die from smoking each year and that 3,000+ kids become regular smokers each day.³ Yet there is no real validity in the 3,000 kids per day; it was apparently made up by the former head of the FDA, Dr. David Kessler.⁴ Likewise, Robert Levy, et al, examined the claim of 400,000 deaths and find that it is grossly exaggerated (p. 24). In any case, if one truly believed the monstrous nature of tobacco and the political rhetoric, one should have advocated the total prohibition. Yet, the only politicians seen even broaching that issue were the allies of tobacco, not its opponents. Krauss suggests the lack of advocacy of tobacco prohibition is because "a ban would financially benefit neither state treasuries nor trial lawyers" (p. 37).

These puzzling facts (from a public interest point of view) have led me to pursue an examination of the tobacco issue from a public choice perspective. While the analysis of the issues surrounding tobacco would likely fill several dissertations, I will narrowly focus on specific issues within the tobacco discussion, with consideration towards application of the principles elsewhere. There are undoubtedly many public choice issues surrounding tobacco, such as how tobacco crop allocations were allotted, and the

³ As cited by Common Cause (using data from the U.S. Centers for Disease Control), on their web site, http://www.commoncause.org/publications/price/tobacco.htm

⁴ The source of his claim actually had 3000 *young people*, age 20 and above, not "kids". See Evans, p. 7.

interaction of tobacco farmers, the industry and politicians. But my specific investigation will primarily consider the states' lawsuits against tobacco, and the subsequent push for a national agreement.

In Chapter Two, I will analyze the tobacco issue from various public choice perspectives. I will first review some of the reasons why tobacco is such a serious issue now. Budgetary constraints will be seen to be a principle cause, although changing political dynamics will also be a factor. I will next evaluate public actions from a rent seeking perspective. While rent seeking applies somewhat, I will argue that a rent extraction explanation seems to be a better theoretical fit. Using the methodology from McChesney, I will evaluate the issue empirically: do the data support an explanation of rent extraction? A priori, I suspect the data to support this explanation; it would perhaps be even more interesting if it doesn't.

In Chapter Three, I will extend the rent extraction model to cover the class action lawsuit. Standard rent extraction models are applicable for political extortion; in this chapter I will extend it to legal extortion. With standard rent extraction, each political actor is seen as having a property right to impose costs on constituents, but can be persuaded not to impose costs through a suitable payment mechanism. In a similar way, the current legal framework gives trial lawyers the right to impose costs through class action lawsuits, but for a suitable fee, they can be persuaded not to impose costs (to settle the case). I will review some the historical reasons why class action lawsuits are examples of rent extraction, and discuss the special interests that resist reform.

An innovative use of the class action lawsuit is the advent of Government Sponsored Litigation. The states, in effect, deputized lawyers to sue the industry—with large contingency fees promised. In this chapter, I will perform an analysis of the differences in health spending by the states after the arrival of monies from the Master Settlement Agreement, signed on 23 Nov 1998. During the course of the states' lawsuits against the tobacco industry, many proponents of the states' lawsuits suggested the reason (for the lawsuits) was to improve public health. If this public interest view is correct, we should see much of the money used for such things as smoking cessation programs, public health programs and smoking education programs. If, however, the public choice view is correct (which in Chapter Two suggests the rational for the suits was to increase revenue for pork barrel spending), then the bulk of the monies spent will be used to reward favored constituents. While much anecdotal evidence is coming in supporting the public choice view, this chapter will examine spending throughout the 50 states. If the rent extraction model is applicable to class action lawsuits in general, I should be able to show it empirically, via the methodology of Beck, et al, and will report the results in this chapter.

In Chapter Four, I will review several conflicting theories of the establishment of property rights, and how changes to property rights occur. For instance, a Demsetzian view would suggest rights are created when the costs of creation are less than the benefits, while a Rikerian view of property rights requires the government to initiate the cost/benefit calculus. I will examine the historical process of change to property rights to tobacco profits and public air, tracing the changes since tobacco was

discovered in America. But I will especially concentrate on changes that have taken place over the last fifty years which have led to a new tobacco policy. Some of the changes include new information regarding the health implications of tobacco, other changes include expanding government and the consequent need for more revenue. Examining these areas and others will provide a case study of changing tobacco policy.

Chapter Two Tobacco Legislation: A Case of Rent Extraction?

This chapter will examine the tobacco issue from a public choice perspective. Initially, I will discuss why the tobacco issue is so prominent now; what factors have led us towards the current tobacco war. Next I will review some of the current public choice models of behavior and how they could apply here. Specifically, I will investigate the extent to which some of the principle actors are following a rent seeking model, and to what degree they follow a rent extraction model. Finally, I will empirically test the rent extraction model and its applicability to the tobacco case. The rent extraction model seems perfectly suited to the tobacco issue, and has not been applied in this area--this dissertation will extend the model to tobacco.

Why Tobacco, Why Now?

Tobacco has long been recognized as a negative influence on health. As seen in Figure 2.1 below, fewer Americans smoke (as a percent of the population) today than at any time in the last 30 years, and yet the anti-tobacco rhetoric is at a fever pitch. So why now? From the standard public interest view of government, one usually argues from one of the following: 1) We only now know how the tobacco companies lied to us, 2) We only now know how environmental tobacco smoke affects us, or 3) We only now know how the tobacco companies have targeted our kids. With response #1, the morally indignant response, people find it surprising that a company would serve its own

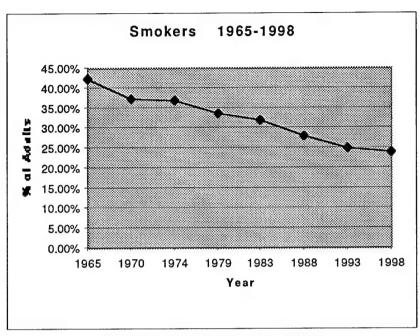


Figure 2.1: Smokers Over Time Source: Centers for Disease Control

perceived self interest by being less than forthcoming. The economist finds this behavior as less than surprising—in fact, it would be surprising to see the opposite behavior. The second answer seems morally justifiable, but unfortunately based on false reports. The EPA study, which concluded that second-hand smoke is deadly, used dubious statistical techniques to arrive at their conclusion (Huber, 1993, p.1). The final reason is rooted at the same motivation as any current policy proposal, "For the Children". Clearly many Americans were upset with the "Joe Camel" advertisements. But the most important issue with respect to youth smoking is how many kids are becoming addicted—and we see smoking rates are down not up.³

³ "Current smoking rates among U.S. high school students may have leveled or begun to decline following years of increased rates." This quote from the Centers for Disease Control website, http://www.cdc.gov/tobacco/research_data/youth/ccmm4933.htm In addition, by examining more detailed

Critics of tobacco focus on decades old internal tobacco memos suggesting the industry was concerned about not having enough adult smokers in the next generation, and pay little attention to industry funding of anti-youth smoking efforts, which seem to be working. Undoubtedly there is *some* element of truth in all these concerns. The moral code of some people may have them outraged at both the behavior of the tobacco industry as well as its product. But it surely seems the behavior has only improved, and yet the outrage keeps rising. One then is forced to consider alternative explanations.

One hallmark of a public choice economist is to assess the incentive structure people face, whether those individuals are in the private or public sector. These incentives are assumed to guide behavior. This does not exclude factors other than monetary, but it does insist upon a view of self interest, whatever factors make up that self interest. This rational choice approach extends the neoclassical model of economic actors to the political marketplace—political actors maximize an objective function given their constraints. Pecuniary motivation (one argument in the agent's objective function) is often seen to be the strongest of the motivating factors of individuals. In the tobacco issue, there are a number of groups whose behavior we must examine to answer our paper's question. National politicians (both executive and legislative branches), state politicians, trial lawyers, smokers (both young {no health problems} and old {many smoking related health problems}), judges, and health organizations are all parties that have an interest in the direction of national tobacco policy. How might their incentive structure have changed during the last 10-15 years?

One of the first areas of major political change has been the increased public concern with the national debt/deficit. As the deficits exploded during the 1980s, public concern grew ever greater, leading initially to Gramm-Rudman-Hollings, a bill which required cuts in all areas of discretionary spending if certain deficit targets were not met. The pain of actually reducing spending caused Gramm-Rudman-Hollings to be jettisoned during the 1990 budget summit; where the administration and congress chose to raise taxes instead. When the economy tanked into recession in 1991, deficits soared even more as revenues shrank and welfare payments increased. Ross Perot made the deficit an issue in his independent run for president in 1992, and Governor Clinton offered even higher taxes to reduce the deficit. After his election, the Republican Party countered by demanding a balanced budget, which in part helped them win control of the congress in 1994—deficits still matter.

Appearing as fiscally responsible is popular, but it does not reduce the desire of politicians to spend towards their favorite interest groups; but now it seems to be a zero sum game. To increase your spending someone else's must go down, or taxes must be increased. After two large tax increases, the public seems ill disposed to consider another large tax hike on marginal tax rates—cutting taxes still ranks high on public opinion polls. And cutting any government spending seems to be impossible. This really only leaves two possibilities: the economy must grow to create ever larger sources of revenue or any tax hikes must be selectively targeted for minimal political damage. Thus one

"Trends in Youth Smoking," Regulation, Summer 1997.

⁴ The Republican party vowed to cut four Cabinet positions in 1994, yet no major government program has been deleted, even those most hostile to Republicans, such as the Legal Services Corporation.

would expect politicians to be searching for an alternative funding mechanism for their plans to further reward favored constituents.

However political entrepreneurs rarely show true leadership, but rather like Kirzner's alert arbitrageur, they are alert to opportunities that they may exploit. The tobacco industry has historically donated large amounts of money to incumbents of both parties; the tobacco industry favored incumbents rather than either party (see analysis below). So the cost of attacking the tobacco industry could be low if one party, while giving up their own use of tobacco money, could vilify the remaining recipients of tobacco money. But the benefits, on the other hand, would be strictly one-sided. The trial lawyers were widely reported to be the largest group donating to President Clinton's 1992 campaign. This group was in the process of suing the tobacco industry on behalf of both state governments and smokers and stood to make millions per lawyer if they could successfully break tobacco (some of which would be expected to flow to political coffers). The trial lawyers contribute virtually nothing to Republicans. An astute political entrepreneur such as President Clinton should only be expected to exploit this opportunity.

This might explain the executive department's support of efforts to restrict tobacco, but what about the legislative branch? With the power of the bully pulpit, one should expect the president to be able to dominate in the debate over tobacco, unless the congress was united in opposition. Since Tobacco contributed heavily to both parties, one might be tempted to think that the congress would be united in opposition—but that

proved not to be the case. Since what politicians need to accomplish their goals is power, one should expect their actions to increase their power. While congressional Democrats were willing to "divide the spoils" of tobacco with Republicans prior to 1994, after 1994 they needed a wedge issue to regain power. Suggesting Republicans want to help the tobacco companies addict our kids may have been more helpful than additional contributions (which the Republicans could also obtain). In game theory terminology, there was a "first move" advantage. This strategy aligned the incentives of congressional Democrats with the executive department.

As seen below in Table 2.1, there was a significant shift in contributions to the political parties following the Republican takeover of congress in 1994.

Table 2.1

	Tobacco PAC	C & Soft Money	Contribution	S
From 1/1/87- 1/1/1993	Democrats	Republicans	Total	Republican\$/ Democrat\$
Soft Money to Parties	\$1,118,072	\$2,601,633	\$3,719,705	2.33
PAC \$ to candidates	\$2,834,539	\$2,766,361	\$5,600,900	.98
From 1/1/93- 3/31/98				
Soft Money to Parties	\$1,974,441	\$10,977,237	\$12,951,678	5.56
PAC \$ to candidates	\$2,213,736	\$4,088,920	\$6,302,656	1.84
Total	\$8,140,788	\$20,434,151	\$28,574,939	
Source: Common Cause				

⁵ As of 19 Aug 1996, trial lawyers had already contributed \$3.8 million (up 24% from 1992) and were once again (as in 1992) President Clinton's largest category of contributors. See Torry, p. F7.

In the earlier period (with total Democratic control of congress), the individual contributions were almost identical. In the later period (with mostly Republican control), Republicans received almost twice as much tobacco money.⁶ And while Republicans owned a sizable advantage in soft money contributions prior to their takeover, this ballooned after they took power, from over twice the amount as the Democrats to over five times the amount Democrats received.

In fact, the text of the Common Cause report clearly marks the election of '94 as the turning point as "Tobacco industry PACs switched their giving from Democratic to Republican congressional candidates starting in 1995" (Common Cause, 1997). In addition, despite the Democratic party's official denunciation of the tobacco industry, they did accept significant contributions that they funneled to state parties, where tracking is much more difficult and receives less scrutiny (Common Cause, 1997). This is consistent with the argument that it was a political issue to be exploited rather than a change in principle.

Ordinarily, public choice investigations do not examine partisan aspects (i.e., Democrat vs Republican), but rather stress institutional arrangements (such as congressional committee structure) that lead to a particular outcome. In this case, however, I believe that this is insufficient. One must answer the question at the beginning of this section, why tobacco, why now? Are there any institutional changes to committee structure which would explain the changing congressional attitude towards tobacco? Without any obvious changes to committee structure, we are forced to look

⁶ In fact, a further breakdown of just the 97/98 cycle shows the Republicans receiving over twice as much

elsewhere, and the change in control of congress itself seems to fit at least the timing of the change. After all, if politicians seek power, and control of the committees gives them power, their party must have control of the congress to control the committees. When the Democratic Party controlled congress for the previous 40 years, partisan issues were less important and committee rules would tend to dominate. But with the possibility of a change of control of congress itself, partisan issues seem more likely to dominate.

Under this scenario what would one expect to see out of congressional Republicans? Since Democrats were criticizing the Republican's acceptance of tobacco campaign contributions, one should expect Republicans to try and neutralize the Democratic offset to their own loss of funds, the contributions of trial lawyers. Trial lawyers have contributed significantly to the Democratic Party in recent years.

According to the American Tort Reform Foundation, the top 25 recipients of trial lawyer donations from 1997 through Oct 1999, totaling more than \$11 million, were associated with the Democratic Party (Cherry, p. 3). Trial lawyers have indeed been a target of Republican wrath in campaigns and in the Contract with America. As Newt Gingrich's press secretary commented on Gingrich's position on the proposed tax settlement, "Whom does it benefit? Our children and their precious health, or a bunch of trial lawyers and their bank accounts?" (Ridenour, 1997, p. 1). And the large fees requested by the trial lawyers made this a relatively easy task: in the Florida case, the proposed settlement had a 25% contingency fee, which allowed *each* lawyer a staggering \$233

individual contributions.

⁷ There was one possible exception, as the "Nixon Campaign Fund" could not be positively identified to either political party.

million! As Robert Levy notes, "Assuming they worked 24 hours per day, 7 days per week, for 42 months, they (the law firm) would earn \$92,593 per hour -- that's \$7,716 per hour for each of the 12 lawyers." ⁸ Judge Cohen (not considered friendly to the tobacco industry) suggested that the magnitude of the lawyer's claims, "shocks the conscience of the Court" (Levy, 1999, p. 1).

Sen. Lauch Faircloth introduced an amendment to the McCain national tobacco bill to cap fees of the trial lawyers at \$250/hr, calling the bill a trial lawyer's pot of gold. However, it was crushed 58-39, with 15 Republicans joining 43 Democrats and only one Democrat defecting (Rosenbaum, p. A18). Coincidentally (?) Richard Scruggs, the brother-in-law of the Senate Majority Leader, Trent Lott, was selected by Attorney General Mike Moore of Mississippi to lead that state's Medicaid recovery suit. He was also Moore's largest campaign contributor. As Levy notes, "state prosecutors doled out multi-billion dollar contracts to private counsel....contingency fees...those contracts were awarded without competitive bidding to lawyers who often bankrolled state political campaigns," (Levy, 1999, p. 1). This leads to the real issue for many civil libertarians: the power of the state can be used on behalf of the trial lawyers' interest.

This also introduces a new key player in the tobacco wars, the state attorneys general. Led by Mississippi's Attorney General Mike Moore, the orchestrated lawsuits against tobacco have been very effective. States access to revenue has also been limited, and new revenue from tobacco would clearly be a source of funding for state

⁸ Florida was not an isolated case. In Louisiana, a state judge approved \$575 million in legal fees which amounted to \$6,700/hr because "Louisiana, the tobacco manufacturers and Lousiana private counsel have acted in good faith." See AP, 2001.

expenditures, just as at the federal level. As Levy states, "The states have effected a shakedown -- no better than extortion -- grounded on this repugnant rule: the states need money; the industry has money; ergo, the industry pays and the states collect." (Levy, 1998, p. 1). But the more important driver may be the ability of the individual AG's to use the issue of their stand against tobacco as an integral part of their political resume as they pursue higher levels of office.

While it may be popular to be against tobacco, the industry's 40-year success in the courts has not made it profitable to be against them previously, unless you can use the public's money. But the simultaneous nature of the lawsuits, along with the potentially unlimited expenditures makes it much more viable. This approach is now being used by the attorneys general against Microsoft and by many big city mayors against handgun manufacturers. Mike Moore is the most well known, although in the subsequent initial collapse of the tobacco deal his stature seems reduced. Minnesota's Hubert Humphrey III has taken a different approach; he initially refused to settle at any price. In the political marketplace this seems to be an effort at product differentiation, his product is commitment to principle.

Under any proposed settlement, the price of cigarettes is seen to be rising significantly. Why would smokers not unite against this tax hike? This is a very complex question, but some issues can help to clarify (this will also be addressed in the rent extraction discussion below). First of all, smokers are a small minority of the overall population (see Figure 2.1 above), so even a unified front would not avail them much in a democratic system, if the remaining members were unified against them. But as a

dispersed group, the costs to organize apparently exceed the benefits. Secondly, there must be a distinction between the young smokers and old smokers. The old smokers presumably have fewer years to pay any tax hikes, and the present value of any tax increase must be balanced against the expected present value of any successful class action lawsuit they may be a part of. Third, a more important issue is likely the fact that smokers in general are members of a lower income class in society, and this may affect their ability/inclination to join the political process to fight for their interests. As claims of environmental tobacco smoke endangering nonsmokers have emerged, it may be socially beneficial for smokers to join in any criticism of smoking which blames Big Tobacco, even if they will individually bear the brunt of the costs. After all, health groups continually bombard smokers with the evils of their habit—it seems much easier when confronted with this evil to blame someone else. And as we will review in our discussion of rent extraction, there may be good reasons for smokers not to organize in their own defense.

The health groups/healthy individuals have their own incentives regarding tobacco. Tollison and Wagner (1992) have detailed how health groups' own financial self interest is served by emphasizing the dangers of smoking. But pecuniary reasons may not be even the most important reason to oppose tobacco. One must not ignore the reality that many people enjoy the power to tell other people how they must behave, independent of the impact to their own wealth. Some critics of anti-tobacco forces consider this to be the most dangerous aspect of the tobacco suits. After all, subsequent targets do not have the "deep pockets" of the tobacco industry. If money was the only reason for the

lawsuits, risks to civil freedom would be limited. But many individuals think they have the right and obligation to force others to live according to their own views.

Nonetheless there are other targets with deep pockets—the snack food industry has been mentioned as one target. The "twinkie tax," proposed by Yale professor Kelly Brownell, could generate significant revenue, over \$1.5 billion on a one cent soft drink tax (Strand, 2000, p.1). Says Brownell, "I recommend that we develop a more militant attitude about the toxic food environment, like we have about tobacco...It {smoking} became so serious that society overlooked the intrusion on individual rights for the greater social good (Strand, 2000, p. 1).

The opponents of tobacco have been helped immensely by the formation of class action lawsuits. Not only does this potentially enrich trial lawyers (if they're successful), but it overcomes the problem of the free rider identified by Olson (Olson, 1965). By transferring some of the benefits (usually one-quarter to one-third) to trial lawyers, the individual smoker becomes organized as part of an interest group with no cost to himself. But to initiate a class action suit, a judge must give the suit class action status. Since judicial pay is determined independently of the cases they try, direct financial remuneration is not likely a factor in their decision. But how a judge decides on a given issue will figure importantly in the political decision of subsequent higher court appointments. Giving class action status to a suit undoubtedly increases the visibility of a judge due to the potentially large awards in class action suits. Thus a public choice view would suggest that more judges would extend class action status to high-profile cases, especially as public opinion turns against tobacco. In addition, as will be discussed in

Chapter Three, changes in the rules governing class action suits in 1966 have greatly reduced judges' ability to dismiss class action lawsuits.

Public opinion has been increasingly negative for tobacco. Not only has the tobacco industry been forced to pay for antismoking advertisements, but the EPA's second hand smoke report gave the public an excuse to react even more negatively. Most nonsmokers consider cigarette smoke irritating. But when the EPA ruled it was also deadly, nonsmokers had the negative externality argument to call for increased government restrictions. Calls for action might well be justified if second hand smoke was as dangerous as portrayed, but as will be discussed in Chapter Four, the EPA's report was fatally flawed. Public Opinion was also shaped by several 60 minutes episodes on tobacco, one of which featured a high profile "defector" from the tobacco industry, a former researcher, Dr. Jeffrey Wigand, who even suggested death threats had been made against him. Mike Wallace said that

What Dr. Wigand told us in that original interview was that his former colleagues, executives of Brown & Williamson Tobacco, knew all along that their tobacco products, their cigarettes and pipe tobacco, contained additives that increased the danger of disease. And further, that they had long known that the nicotine in tobacco is an addictive drug, despite their public statements to the contrary, like the testimony before Congress of Dr. Wigand's former boss, B&W's Chief Executive Officer Thomas Sandefur.⁹

This seemingly had an impact on public opinion of the tobacco industry; in any case, the 60 minutes review did nothing to help their image. As discussed below, attacking the reputation of the tobacco industry was an integral part of rent extraction.

⁹ transcript of 60 Minutes program, found at http://www.gate.net/~jcannon/documents/960204t1.txt

Public Choice Issues

All of the previously discussed facts play a role in a public choice analysis. But in this section, I will review some of the public choice issues that may be applicable to the tobacco settlement. Examining some of the early public choice work, Niskanen's analysis (1971) of the bureaucracy potentially offers insight into observed behavior. In his model, senior bureaucrats are driven by power, patronage, status, etc., all captured by budget maximization (either total or discretionary budget). The bureaucrat gets a significant amount of the agency's revenues in a lump sum appropriation (which is a positive function of bureaucratic output), versus a percentage of sales as in the private sector. Thus in the budget maximization process, the bureaucrat will produce a higher level of output than is socially desired (if his income weren't dependent upon the level of output)—the easiest way to get more money in government is for your mission to expand. Therefore the FDA's attempt to regulate cigarettes can be seen as an effort to increase their budget and thus maximize their utility.

Another puzzling issue may be solved by applying Niskanen's model as well.

Levy (1998, p. 26) noted that government data on smoking related deaths has used greatly inflated numbers for years, long after the correct statistical technique was well known. Likewise, in the introduction to this dissertation, I noted the continued use of the "3,000 kids per day begin smoking" claim, despite no factual evidence to support. Why do these patently false claims continue to be advanced? Under Niskanen's model, government bureaucrats want to maximize their budget. I argue that by exaggerating the size of the threat that only the bureaucrat's agency can help defeat, would at the margin

increase the size of the agency's budget (despite Parkinson's earlier work). After all, we know what happened to the size of the defense department (in real terms) after the end of the cold war. Nevertheless, whether a true motivating factor or not, Niskanen's model is at least consistent with bureaucrats exaggerating claims that would benefit their agency, and that is exactly what we see.

Public Choice also has much to say about regulation. Early public interest views of regulation assumed that the presence of market failure (any deviation from the perfectly competitive model—which is everything in the real world) justified government regulation. Furthermore, the regulators were assumed to maximize a Benthamite social welfare function. Yet actual results of regulation were often starkly different from the public interest view-- regulation was desired by some businesses, in other cases it was obviously wrongheaded (McChesney, pp. 7-9).

Stigler (1971) offered a theory which more closely fit reality. In his model, businesses prefer regulation to ensure protection of producer interests. Regulation offered a legal mechanism to cartelize an industry. Private attempts at cartelization were notoriously ineffective due to cheating, costs of negotiation, and possible new entrants. But as McChesney says (p. 11), "It is the state's ability to apply the force of law to any monopolizing arrangement that frequently makes regulation a superior mechanism for creating rents." Regulation in Stigler's model was an attempt by the industry to reduce output and gain rents by competitive restrictions. The novelty in Stigler's approach was his presentation of regulation from the economists' familiar exchange model: what were the benefits that the government could provide an industry, and what were the costs to

obtain that benefit? In this model, tobacco's acquiescence to warning labels would be seen as a deliberate attempt to mitigate future health claims against the industry. This agrees with one recent study by Common Cause (2000), where "tobacco companies now see some good in regulations, provided they can limit their impact." Stigler's model would suggest Big Tobacco would want to use the FDA to restrict other potential competitors.

A perfect case study of the Stigler model and tobacco was illustrated brilliantly by John Calfee, in *The Ghost of Cigarette Advertising Past* (1997). In this article, Calfee explored the history of cigarette advertising since the early 1920s. Although current conventional wisdom might suggest that the tobacco industry would avoid health issues at all cost, in fact, health issues were considered a major source of competitive activity. This was particularly true for small companies trying to capture market share. But it was also true for larger companies, who attempted to stimulate demand at the expense of other industries, including candy. The candy industry did not sit idly by in the face of competitive pressures, but quickly responded with their own criticisms of cigarettes:

Do not let anyone tell you that a cigarette can take the place of a piece of candy. The cigarette will inflame your tonsils, poison with nicotine every organ of your body, and dry up your blood—nails in your coffin (Calfee, p. 39).

This aggressive campaign was increased by tough competition within the industry in the early 50s, especially following the release of several studies showing the correlation of smoking and lung cancer (Calfee, p. 41). Claims of superior health benefits by smoking one brand versus another were common. "Not a single case of throat

irritation due to smoking Camels," and "Why risk sore throats?" were just some of the advertising slogans that kept the public's attention focused on the health dangers of smoking (Calfee, p. 39). The result was devastating to the industry, while it was beneficial to smaller competitors who gained market share. During the toughest competitive period of 1953-54, cigarette consumption as a whole (annual per capita sales) declined 3% in 1953 and 6% in 1954, "there has been no period in which cigarette sales suffered as badly as during the period of fear advertising in 1953 and 1954" (Calfee, p. 42). Competition particularly hurt the industry leaders, as "Of the six major manufacturers, the only one to gain sales in the disastrous year of 1954 was Brown and Williamson, one of the smallest firms and the only one that concentrated on filter brands (Calfee, p. 42).

The Stigler model outlined above would suggest that industry would desire regulation to prevent "unhealthy" competition. Whether or not the industry actually caused it, it nonetheless came, as the Federal Trade Commission issued new rules that "prohibited all references to "throat, larynx, lungs, nose or other parts of the body (Calfee, p. 42). The end result of this story was that advertising eventually focused only on the pleasantness associated with tobacco. Smaller competitors were denied the effective use of health as a competitive issue, the actual physical benefits of filtering were sacrificed in order to improve taste, and overall smoking went back up. Suffice it to say that industry leaders began to improve their competitive position vis a vis their smaller counterparts, exactly as the Stigler model would suggest.

Another key issue to examine is the effect of interest groups in the regulatory process. Interest groups were traditionally thought of (from a political science perspective) as counterbalancing one another, and that effects of interest groups would not deviate from a median voter position. Mancur Olson (1965) exploded this idea with his introduction of the "freerider" problem. Since benefits of interest group activity had a "publicness" character (they were mostly nonexcludable), some individuals can benefit by letting others organize and become politically active while they "freeride" and do nothing. Olson thought this would lead to an asymmetry, a divergence from the median voter result, and some producer groups would likely dominate consumer groups.

Olson's insights were further developed by Stigler (1971), who argued that the producer's existing organization provided the impetus for political action. Once an industry was already organized, the additional costs to lobby government for rent creation is small. Consumers, on the other hand, are disorganized due to Olson's free rider and associated transaction costs. Thus the consumers are dominated by producers and their consumer's surplus is extracted. Unfortunately for the Stigler model, there are many cases where consumers are organized, and do influence the process.

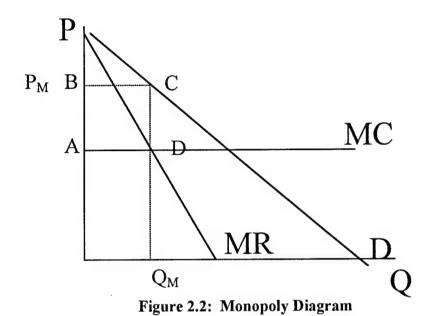
Peltzman (1976) addressed this limitation by formalizing the Stigler regulation model, taking into account the actions of the losers of the regulatory process. In his model, beneficiaries pay with both money and votes, with the productivity of the dollar mitigating the loss (of votes) due to opposition. For Peltzman, the crucial decision a regulator must make is the size of the group he should favor. The solution to his model suggests the marginal political return from a transfer must equal the marginal political

cost of the associated tax. This ensures that losers (of the regulatory process) must be taxed less than the interests of the winners would dictate, so the winner does not take all as in the Stigler model. This seems to more accurately represent what we see with the tobacco industry. While benefiting from some political measures, others have damaged their interests, yielding a net benefit that is less than the maximum, exactly as the Peltzman model would suggest.

Gary Becker proposed an alternative theory of interest group behavior, basically applying the Coase Theorem to interest groups (Becker, 1983). In Becker's world there is perfect information, and low transaction costs. Becker suggested that where gains from trade are possible, the market will develop ways to overcome; the gains can be privatized. Consumer preferences will be effective at the margin, thus limiting the amount of benefit the producers may gain at the expense of the consumer. In this world, there is free entry and exit for pressure groups, and inefficient pressure groups will be put out of business. Becker's model leads to the most efficient way to redistribute resources. Indeed, as I will develop in Chapter Three, the political market has developed a mechanism to privatize the gains; the trial lawyer has intervened to "help" the consumer organize through the class action lawsuit.

Unfortunately, neither Becker nor Olson addressed the supply of favors that interest groups seek. Tullock introduced the concept of rent seeking to address the behavior of interest groups seeking government favors (Tulluck, 1967). In his model, in the efficient rent seeking limit, interest groups will expend up to the present value of the benefit they seek to secure the benefit. This leads to the Tullock rectangle, where the

producer is willing to spend up to the present value of the monopoly privilege (area ABCD in Figure 2.2 below).



With this insight, we can see the tobacco issue in a different light. Rent seeking is characterized by actions taken that expend real resources to change the distribution of the existing wealth, as opposed to creating new wealth. The actions of the smokers, lawyers, judges, and politicians are intended to change the existing distribution and can thus be properly seen as rent seeking. Ordinarily, however, rent seeking is seen in the behavior of actual market participants (producers and consumers). With tobacco, many of the rent seeking parties mentioned above are not part of the market process. In an efficient rent seeking model, one would expect the parties seeking rent to expend up to the amount of the producer's surplus to gain the rent.

This may not occur since efficient rent seeking requires three assumptions 1) risk neutrality, 2) symmetric investment opportunities, and 3) free entry. In the real world, none of these are likely to exist. As Hillman and Katz argue, with the large rents associated with tobacco and risk averse individuals, as the rent goes up relative to income, less dissipation of the rent will occur (Hillman and Katz, 1984). Assumptions two and three are clearly seen to be false from the preceding discussion: the state AG's steered the trial lawyer contingency contracts to favored groups, which limits others' opportunity to win.

One of the real problems of the destructive nature of rent seeking is the nature of the behavior it will induce. Based on his experiences in China, Tullock noted how people would mutilate their bodies to further their "occupation" of begging. In pursuit of the tobacco rent, one could expect smokers to engage in activities to make themselves look as pathetic as possible to potential jurors. Likewise, one should expect states to stress they only face costs associated with health care, they should dutifully ignore any possible financial benefit they receive from smokers dying earlier. In fact, this is just the case. Kip Viscusi (1997) has detailed how smoking actually saves states money, since smokers die earlier (the states save both health care and nursing home costs). Mississippi calls this rational cost analysis "ghoulish," "offensive to human decency" and "unquestionably contrary to public policy," (Viscusi, p. 3).

Rent seeking also can lead to results that are just the opposite of stated public policy. With tobacco, one of the likely ways that this would manifest itself is that if rents are allocated to smokers, one could expect to see increasing numbers of people smoke in

pursuit of the rent, which is exactly opposite of the stated intent. While the actual number may be small, to the extent the marginal smoker quits out of fear of the costs his family will have to endure, he may well continue in the presence of an available rent. In a recent case, even healthy smokers are suing tobacco (Morton, 2001). Should they prevail in court, it would provide further incentive to smoke.

This single-minded pursuit of the rent leads to the potential problem of the "transitional gains trap." Upon creation of a rent, the value of the rent will be capitalized in the value of the company or industry granted the rent. Threats to eliminate that rent, therefore, constitute an attack on the capital value of the company and therefore are fought by the current holders of the rent. Once rent seeking begins, resources will continue to be dissipated to preserve the rent; it's very difficult to change the behavior. With the tobacco industry, one could make the case (following a Stigler view of regulation), that prohibition of health claims in advertising restricted competition and was a source of rent to the industry. If so, we should see the industry resist any changes to the existing regulation. In fact, most of the industry did resist subsequent efforts by the FTC to include tar and nicotine yields in the mid '60s, while smaller competitors such as Lorillard quickly introduced health as an advertising theme (Kluger, pp. 300-303).

While rent seeking may be the most obvious public choice issue, perhaps the most pernicious is the application of the rent extraction model—a model of political extortion. While calling some of what our legislators do extortion may seem overly cynical, they themselves acknowledge this. Rep. Ron Lewis described the proposed federal suit against tobacco as, "This case is not about the law, but about the federal government

extorting money from an industry it does not like. Which industry will be next?" (Fram, 2000). There does seem to be some limit to this, as former Louisiana Governor Edwards was just sentenced to 10 years in prison for "the blatant misuse of government power" as he demanded hundreds of thousands of dollars for riverboat casino licenses (UPI, 2001).

Under the rent extraction model, originally developed by McChesney, politicians are not merely brokers of rents for a fee, but rather they are independent actors with their own demands. The demands are levied on businesses, who must respond or be punished with punitive government sanction. As McChesney notes, "once the politician is seen as an independent actor in the regulatory process, his objective function cannot be treated as single-valued. He will maximize total returns to himself by equating at the margin the return from votes, contributions, bribes, power and other sources of personal gain or utility," (McChesney, p. 22).

Not only will the political entrepreneur seek rent creation opportunities, he will seek to capture existing private rents for his benefit. With rent seeking, agents seek to gain a rent through public action. In contrast, with rent extraction political entrepreneurs see *existing* private rents as a potential target—but in this case, the rents are a product of enterprise and superior methods of satisfying consumer desires (McChesney, pp. 23-24). In this model, politicians are seen as obtaining a property right to impose costs with their election. In return for a rent, they may not exercise this option. This can only succeed if the threats are credible; occasionally a punitive bill must be passed.

An example of this can be seen in Figure 2.2 above. One can use a standard monopoly diagram to explain cigarettes; competition is really only for capturing new

smokers--once addicted, smokers rarely change brands. Assuming the long run marginal costs are constant, the area ABCD is the monopolist's profit. The politician can threaten to extort the company and it would be willing to pay up to this amount to preserve the profit. In fact, the government could threaten to take more than this amount, to bankrupt the industry, as the lawsuits by the states over Medicaid could have done. This threat, however, can be seen as usually empty since bankrupting the companies would result in a lower present value of the potential stream of extortion income. As Tullock notes, rent extraction from the perspective of the politician is a repeat game (McChesney, p. 39). 10

There are a variety of ways the politician could threaten tobacco. They could force prices arbitrarily higher through increased excise taxes. Or they could restrict quantity by regulating through the FDA or by restricting availability to certain locations. Another option would be to raise costs through legal pressures. In addition, politicians may threaten the fixed capital of a company. As McChesney points out, this can include a company's reputation (McChesney, p. 27). As discussed above, the tobacco industry has been continually vilified by both Congress and regulatory bureaucrats, which fits the rent extraction model of politician's raising costs by attacking fixed capital (reputation). But any one or combination of these actions could reduce the monopolist' profit ABCD.

Could this really happen? McChesney reports on "milker bills," "Cash Cows," "Juice Bills," and "fetcher bills" as all terminology used in various legislatures to extract rents (McChesney, p. 30). While this may seem simply as a transfer from one group to

¹⁰ However, as stated earlier, the politician must appear credible in his threats, thus occasionally, the threat must be carried out. So in practice, there is some danger of actual bankruptcy, despite the higher PV of extortion.

another, in fact the effects are more costly. The possibility of rent extraction reduces capital investment, and in addition, resources are expended to hide producer's surpluses. After all, if one has no money to extract, one won't be mugged.

This may explain the tobacco issue with respect to politicians' actions. Using regulatory and taxation devices, they are attempting to expropriate the producer's surplus. McChesney suggests that politicians may use specialized bureaucrats to impose costs, thus creating a demand for the politician to stop. In fact, as discussed below, part of the impetus for the tobacco industry to settle was after pressure from both the FTC and the FDA. During the debate over the proposed settlement, a natural question was "If tobacco is so harmful, why not ban it?" Yet this question was only asked by tobacco's allies, who never intended to ban it; the opponents never raised the possibility of a ban. 11 This is consistent with a rent extraction view.

One could also view the efforts against tobacco as an object lesson for other industries: it increases the credibility of threats to other industries. McChesney also notes that both parties to rent extraction will desire long term "contracts" to the extraction process; certainty is beneficial for better planning and lower transaction costs (McChesney, p. 88). This is clearly seen in the tobacco deal; the Master Settlement Agreement with the states was for a period of 25 years. Ordinarily, opportunism (or simply inability, as the politician may not be reelected) may inhibit long term arrangements (McChesney, p. 90), which perversely simply encourages more rent

¹¹ As one reviewer has pointed out, the critics of tobacco may have psychically calculated the net costs of prohibition as simply being greater than further regulation, which would be consistent with a public interest view. This may be true, but is impossible to know. In any case, that argument has not been advanced publicly to my knowledge.

extraction. However, the Master Settlement Agreement involved so many parties that it seems more likely to prevail. It also helps to explain why the tobacco industry wanted the original agreement to go through the U. S. congress and get enacted as a federal law—a federal law is much more likely to survive over the longer term than any state agreement.

The idea of rent extraction works well, especially when coupled with Terry Moe's work on the executive branch (Moe, 1990). Moe outlines how early public choice work focused on the legislative branch, with the idea of voluntary exchange between actors. While this put economics into politics, it never should have replaced politics. In politics, voting is used to determine how public authority -- the power to control others -- is exercised. President Clinton has effectively used this power by using both the Justice Department and the Food and Drug Administration in his attempts to coerce concessions from the tobacco industry. Moe indicated that the power of the executive department is not simply from the veto power, but rather the regulatory power structure. As discussed above (and below), this regulatory influence was critical in the case of tobacco (with both the FDA and FTC providing significant threats to the industry). President Clinton never had to use his veto and yet was able to exert considerable influence.

All of these considerations seem to imply rent extraction is well suited to explain the tobacco issue. But as asked in section one, why do the smokers allow the extraction to come at their expense (since they pay most of the increased costs)? Rent extraction offers insights into interest group organization that are different from conventional public choice, and may provide additional insight to this question. As discussed earlier, the

Olson and Stigler views of interest groups always have the producer groups better organized and thus more effective than consumers groups, primarily because of freeriding. But because of dead weight losses (the loss in consumer surplus due to lost gains from trade), the consumer always loses more than the producer. The Becker model offers a slight improvement, in that consumers don't sit idly by and at the margin their preferences force lower prices. But since the consumers always lose more than the producer gains, why aren't they able to force prices down to the competitive price?

McChesney reviews this question (pp. 135-138), and further notes that while consumers do face differential costs in organization, they may also face differential benefits—so freeriding is not a sufficient explanation to explain interest group organization. In his model, rent extraction helps to explain why consumers don't organize. McChesney first notes that one of the bidders for any group's surplus is always the group itself (p. 141), and that without transactions costs, the group currently possessing the surplus would always be the winner. Since politicians prefer to extract with minimum transaction costs, they prefer to extract from well organized groups (McChesney, p. 145). So, paradoxically, increasing organization to protect one's interests also makes a group a more viable target of rent extraction!

This may help further explain why some potential interest groups do not organize. Since consumers always lose more than producers, they might be willing to pay even more, if they could be effectively organized (McChesney, p. 149). As such, this explanation may also provide an answer to why smokers did not organize to resist the tobacco deal. Since they were going to basically pay for it anyway, by not organizing the

most that could be extracted from them would be the amount that the producers would lose, not their own consumer surplus, a much larger amount.

All of these public choice considerations seem to have at least some role in explaining what we've seen in the tobacco industry. But there remains a need to empirically verify the preceding analysis. I will empirically verify the applicability of the rent extraction model to tobacco below.

Empirical Testing of Rent Extraction

If the tobacco issue is best modeled as rent extraction, then it is possible to test the model empirically, using event studies. Brown and Warner (1985) provide an examination of the applicability of event study methodology to daily stock data (earlier work had already demonstrated suitability for monthly stock returns). They find that event studies based on the ordinary least squares (OLS) market model, using daily data, are well specified under a wide variety of conditions (see Appendix A for additional event study issues). The following discussion repeats the methodologies used by Beck, Connolly and Hoskins (1992), Eckbo and Wier (1985), and McChesney (1997), which are consistent with the Brown and Warner study. Beck, et al, tested rent extraction theory with government threats to 30 different Canadian firms/industries and their analysis supported the rent extraction hypothesis. Likewise, McChesney applied his theory to the pharmaceutical industries (following the election of President Clinton), since a large part of Clinton's health care proposal centered on price controls of expensive drugs. Once again, his empirical work supported the rent extraction hypothesis. I will follow the methodology of McChesney in applying the rent extraction theory to the national tobacco

settlement. To test the rent extraction model, I assume that stock markets are efficient¹² and that prices reflect the present discounted value of future cash flows.

Hypotheses

McChesney notes how some threats levied against corporations/industries and subsequently retracted may have reasonable, public interest roots. For instance, legislators may simply make a mistake—once they realize they've made a mistake, they will withdraw the legislation. Alternatively, the issuance of legislation may serve the function of eliciting constituent response, allowing the legislator to more accurately measure constituent desires. If negative constituent response is measured, a legislator who desires to maximize constituent welfare would withdraw the legislation. Thus testing of alternative hypotheses must distinguish between true rent extraction and possible public interest behavior. In the case of the public interest view, the ultimate retraction of the legislative threat should leave the company no worse off than originally. If the rent extraction view is correct, however, the true purpose of the legislative threat was to extract privately created rents. Therefore, after the retraction of the threat, the wealth of the company (as represented by market capitalization) should be lower.

Following Beck, et al, four hypotheses are proposed to test for rent extraction.

The first three hypotheses are consistent with rent extraction, while the first and the fourth are consistent with a public interest perspective.

Hypothesis I: Upon market recognition of an unexpected government threat, the price of a company's stock will drop, reflecting the market's perception of lower future cash

¹² In the semi-strong fashion, whereby all publicly available information is known and factored into the

flows. This results in an abnormal negative stock return during the event period (defined below). This hypothesis is consistent with either the public or private interest explanation (explaining the subsequent retraction).

Hypothesis IIA: A retraction of the government threat will not affect the stock price of the company in question; the stock price will reflect a normal return. This hypothesis is the strong form of rent extraction, with the retraction having no effect on the stock price due to: 1) the government was able to extract all the rents or 2) the market believed that a payoff was certain (at the time of the original threat), and the threat would not be carried out.

Hypothesis IIB: A retraction of the government threat will result in an increase in the stock's price, an abnormal high return. However, the increase will not be as great as the initial decrease, reflecting the rents that were successfully extracted. This is the weak form of rent extraction.

Hypothesis IIC: A retraction of the government threat will result in an increase in the stock price of the company in question, with the increase offsetting the initial decrease. This hypothesis supports the public interest view.

The empirical examination will examine two issues. The necessary condition is that a government threat results in an abnormally low stock return (which as noted above, could support either the public choice or the public interest proposition). The sufficient condition is whether or not there is an abnormally positive return on the subsequent retraction of the threat. If not, the rent extraction hypothesis (strong) is confirmed. If

there is an abnormally strong positive return, I will compare the magnitude of the positive return to the initial decline. If it is less than the initial decline, the weak rent extraction hypothesis is supported. If it is approximately equal, I will be unable to reject the public interest hypothesis.

Data and Methodology

To test the hypothesis that the threat of a hostile national comprehensive tobacco bill would be passed—which was ultimately rejected—resulting in a loss of wealth to the tobacco industry, I must acquire data on unexpected government threats. As with McChesney, it is not clear a priori when the events actually take place. For instance, the national comprehensive tobacco bill was discussed for many months prior to its initiation, and it is also not clear when the market knew it would not pass (it was finally rejected in the Senate in June of 1998). While McChesney outlined his theory in terms of legislative threats, I will not limit the event selection to legislative threats. With the Clinton administration's prodigious use of executive orders to enact legislation directly, threats from the executive department may reasonably be seen by market participants as constituting potential "legislation." Likewise, the recent government sponsored litigation is an attempt to regulate from the bench, a function normally reserved for the legislative branch. As Alabama Attorney General Pryor states, "Their lawsuits are designed to change the nature of civil and public litigation by shifting the power of governments to tax and regulate businesses to the courts and out of the hands of our legislative representatives," (Fund, 2000, p. v.). Thus the states' lawsuits against the tobacco industry may also be part of the threat events to test.

As stated above, I will use methodology similar to McChesney, as follows. This technique basically combines the two stage approach of Beck, Hoskins and Connolly, since it is difficult to know a priori the days which the market would react to information about the threats. I will estimate coefficients to the following regressions:

$$r_{t} = \beta_{0} + \beta_{1}rm_{t} + \beta_{2}d_{1t} + \beta_{3}rm_{t}d_{1t} + \beta_{4}d_{2t} + \beta_{5}rm_{t}d_{2t} + \beta_{6}d_{3t} + \varepsilon_{t}$$

$$r_{t} = \beta_{0} + \beta_{1}rm_{t} + \beta_{2}d_{1t} + \beta_{4}d_{2t} + \beta_{6}d_{3t} + \varepsilon_{t}$$
(1)

where

- r_t = a vector of daily, continuously compounded returns to an equally-weighted tobacco portfolio of Philip Morris and RJR;
- β_1 = the coefficient that expresses the influence of the daily, continuously compounded equally-weighted returns of the CRSP S&P 500 index;
- $rm_t =$ a vector of daily, continuously compounded, equally-weighted returns to the CRSP S&P 500 during the estimation period;
- β_2 = the coefficient representing the average one-day abnormal return to a company or portfolio during the event period;
- d_{1t} = a dummy variable, equal to one during the event period and zero otherwise;
- β_3 = the coefficient that expresses the influence of the daily, continuously compounded, equally-weighted returns of the CRSP S&P 500 index on the variability of r_t during the event period;
- β_4 = the coefficient representing the average one-day abnormal return to a company or portfolio during the threat retraction period;
- d_{2t} = a dummy variable, equal to one during the threat retraction period and zero otherwise;
- β_5 = the coefficient that expresses the influence of the daily, continuously compounded, equally-weighted returns of the CRSP S&P 500 index on the variability of r_t during the threat retraction period;
- β_6 = the coefficient that expresses the abnormal return for the date 9 Aug 1996 (rationale explained below);
- d_{3t} = a dummy variable, equal to one on 9 Aug 1996 and zero otherwise;

 ε_t = a vector of daily random disturbances, assumed to be independent of rm and d, serially uncorrelated and distributed multi-variate normal with mean zero and constant variance.

The rational for testing two equations is that the additional coefficients (β₃ and β₅) in equation one are intended to capture any systematic change to relative risk during the actual event and threat retraction periods, respectively. Following standard event study methodology, I gathered data on stock market valuations for an estimation window (200 trading days) that precedes the actual event (the threat), during the event window (surrounding the threat) and also a threat retraction window. The source of the stock market valuations was the Center for Research in Security Prices (see Appendix A for a short description of this program). If chose an equally weighted tobacco portfolio consisting of Philip Morris and RJR, since their combined share of the tobacco market is well in excess of 50% and they are the most profitable (and thus capable of having rents extracted). For the market index, I choose the CRSP S&P 500 index, which is the broadest index available.

As McChesney outlined in his development of this methodology, the specific dates of the threat are difficult to identify, therefore the exact dates chosen are somewhat arbitrary—and the dates chosen do moderately affect the significance of the outcome, as will be discussed below. This requires a detailed discussion of the history of the national tobacco bill, to identify the rationale for the dates chosen in this study. There are three dates we need to identify: the beginning of the threat period, the end of the threat period,

¹³ Source: CRSP, Center for Research in Security Prices. Graduate School of Business, The University of Chicago 1999. Used with permission. All rights reserved. www.crsp.uchicago.edu

and the end of the retraction period. It seems logical to begin the threat period with the initiation of the bill, but that date is unclear.

To assess when market participants first learned of the potentiality of the tobacco bill, I searched the Dow Jones Interactive news service, which includes most national newspapers and financial papers (Wall Street Journal, Washington Post, etc.) and lexis/nexis. The earliest indication of a national settlement was found in an AP newswire dated 15 Feb 1997, which noted that tobacco companies were "laying the groundwork to take the issue to Congress" and were looking into a "comprehensive settlement" (AP Newswire, 1997). This was followed by a more specific article from Bloomberg Business News on the 18th of Feb, which indicated talks were close to reaching a settlement of all tobacco related issues, with an initial estimate of \$250 billion as the settlement price. This article clearly stated national legislation would be required to implement any agreement (Bloomberg, 1997).

These initial articles were followed by others which speculated that a deal was in the works, although some official participants still denied it. However, on the 11th of March in a filing with the Securities and Exchange Commission, Philip Morris stated "that it may enter secret discussions to settle health-related lawsuits" (Buckingham, 1997). Much of the discussion in these articles related to how the industry could afford to pay such large settlement costs, by raising prices. The discussion also hinted that given the discounts in market multiples of tobacco companies' stocks, a legal settlement costing the industry billions might actually result in an increased stock price. Clearly market participants were already being given information to assess the potential costs of a

threat to the industry. For the empirical work below, I chose the 20th of Feb 1997 as the beginning of the threat period, based on the specificity of the widely available information discussed above published shortly before that.¹⁴

The estimation window went back 200 trading days prior to the 20th of Feb, according to standard event study methodology. However, there was one unusual data point, which necessitated further examination. Ideally, event studies are able to isolate the event itself from the estimation window, i.e., we first need to understand the relationship between the individual stock and the index before we have anything extraordinary to upset the relationship. With the tobacco industry, this is exceedingly difficult, as it has been constantly threatened both legislatively and judicially. In fact, as I reviewed the news stories prior to our actual event starting date, I found numerous occurrences of state lawsuits (by state attorneys general), individual lawsuits and political statements publicly mentioned in the financial press. This makes a truly clean estimation window virtually impossible, although if the level of political pressure is unchanging, one could measure the extent to which the market perceived the event as an additional threat.

Nonetheless, the data showed one large outlier—9 Aug 1996. On this date, a Florida jury awarded \$750,000 to the plaintiff, the first ever monetary judgment for health injuries suffered while smoking. Although this verdict was against Brown and Williamson, it nonetheless had a huge impact on Philip Morris and RJR, each stock's price losing over 11% on the day. Given the impossibility of separating the legal threat from the political effect, this large negative result can be seen as part of the threat I am

¹⁴ Not coincidentally, this date also gives the highest level of statistical significance in the results that

trying to measure. Rather than deleting this outlier, I added a separate dummy variable (d₆) to capture its effect. This will prevent it from affecting the normal estimation period (which is supposed to be absent from threat), and allow an accurate comparison of the threat period to the estimation period. 15

The Campaign for Tobacco-Free Kids (CTFK) provides a good review of some of the major subsequent events in their yearly review, which I will summarize below. 16 The threat against the industry accelerated in late March of 1997, when the Liggett Group (another tobacco company) "agreed to essentially turn states' evidence against the tobacco industry." In the words of one anti-tobacco advocate, Matthew Myers, executive vice president of the CTFK, Liggett admitted that "smoking causes cancer, is addictive, and that the industry targets kids in its marketing." Another serious blow to the industry occurred about the same time, as a federal court reviewing the FDA's claim to regulate tobacco ruled in favor of the FDA. On the 3rd of April, RJR and Philip Morris sat down officially and publicly with state attorneys general, anti-tobacco advocates, and trial lawyers. As formal discussion on the deal progressed, so did government pressure. On May 27th, the Federal Trade Commission charged RJR with illegally inducing children to smoke with its Joe Camel advertising.

This pressure was emblematic of the government threats against tobacco; tobacco was repeatedly vilified in the court of public opinion because of their alleged actions against children. This negative campaign helped shape the public's opinion regarding

follow. Nonetheless, any date close to this would also have yielded good results.

http://tobaccofreekids.org/report/yearsinreview/1997inreview.shtml

¹⁵ Nonetheless, if I had included 9 Aug 1996 in the estimation window (without the dummy), the regression still would have yielded statistically significant results, although less compelling than those reported here.

tobacco and created the climate for potentially huge jury awards in the legal battles, in addition to being part of the rent extraction methods to raise costs. The tobacco companies would naturally raise the expected value of a settlement, and would accordingly be more willing to settle at a higher price. Sure enough, a proposed settlement was announced on 20 June 1997, with a price tag of \$368 billion, significantly above the initial estimates from February. The steep price would include a restriction of tobacco advertising, funding of anti-smoking and health related activities, and allow FDA regulation of tobacco. But the agreement would also end the states' suits, and most importantly, cap the amount of punitive damages that the industry would pay in any given year.

While this might seem to be the culmination, it was only the beginning. President Clinton openly entered the fray in September of 1997, claiming that any national agreement would have to satisfy his requirements, raising the bar on the tobacco industry. Senator John McCain subsequently introduced legislation in November of 1997 that was to become the national comprehensive tobacco settlement. The price of a legislative solution would continue to grow, and the final bill approved in Senator McCain's Commerce Committee would total more than \$500 billion, and offer less legal protection to the tobacco industry. The bill passed his committee on a 19-1 vote on 1 April 1998. The bill was brought to the floor of the Senate on 18th of May, and ultimately killed on a procedural vote on the 17th of June.

Once again the end of the threat period matters, so we need to delve a little deeper into the events of the time. While its not entirely clear when the tobacco settlement

ceased being something the industry supported (although they ceased negotiations shortly after the Commerce Committee acted), industry opposition was apparent by the 1st of May 1998. Philip Morris' CEO Geoffrey Bible urged his stockholders to pressure members of congress to oppose the bill (Berselli, 1998). The industry began a massive ad campaign against what they called a huge tax increase. The U.S. Chamber of Commerce also ran an ad campaign against the bill, especially criticizing its reward of trial lawyers. As one lobbyist commented, "If trial lawyers get more money out of this than they can spend on Mercedes and swimming pools, they will spend more on electing candidates and state judges who see things their way (Torry, 1998)." This campaign was effective, as the anti-tobacco group CTFK lamented, "The industry changed the debate from "protecting kids" to a "tax increase and big government" issue." 17

One by one, influential Republicans in the Senate (who were in power) came out in opposition to the bill. Senator John Ashcroft (R-MO) held a press conference denouncing the bill as an attempt to hike taxes. "Only in Washington would bad choices by free people become an excuse for a big tax hike," Ashcroft said, "In Washington, taxes and spending are the only things more addictive than nicotine," (Mathis, 1998). Senator Larry Craig (R-ID) chimed in, "It amounts to the biggest tax increase in this nation's history," (Kellman, 1998). Assistant Majority Leader Don Nickles (R-OK) and Paul Coverdell (R-GA) also joined Craig in his efforts to defeat the bill. Meanwhile, press reports at the time showed the largest recipient of tobacco campaign contributions was Senator Trent Lott, the Senate Majority Leader (Camire, 1998). This suggests he

¹⁷ http://tobaccofreekids.org/report/yearsinreview/1998inreview.shtml

would likely oppose the bill, since the industry was now actively campaigning against the measure.

As it appeared the measure was losing support, the states Attorneys General threatened on the 19th of May to take the issue back (and the money that would follow) if Congress didn't act. Sensing the measure slipping away, President Clinton staged a White House event on the 21st of May, with over 1,400 children, to emphasize the threat to children and the need to get the bill enacted (Financial Times, 1998). On 30 May, in an Op-Ed article in the New York Times, Jonathan Walters encouraged readers not to be dismayed by the demise of the tobacco bill. Clearly the handwriting was on the wall; the month of May saw the full scale assault of the bill by the industry and by the end of the month liberal papers suggested not to worry about its demise.

For this empirical study, I chose to split the difference in May, and end the threat environment on 15 May. One could reasonably pick other days in May as well, although I think its fairly clear we don't need to go until the 17th of June, when the bill was officially defeated. Wall Street likely knew much earlier the expected result, as the above discussion demonstrates. The last date to select would be the end of the threat retraction, or recovery period. In this case, it seems much easier. After the demise of the bill on the 17th of June, the tobacco companies went back to work with the states. They eventually agreed to the Master Settlement Agreement on 16 Nov 1998 and officially

¹⁸ Once again, changing to other dates, while reducing the significance of the coefficient, would still have produced statistically significant results.

¹⁹ Indeed, in A. G. Edwards' report to its clients, *Tobacco Industry* dated 20 May 1998, stated that "McCain's tobacco proposal, in its current form, will have difficulty being passed into law," p. 3.

signed it on 23 November 1998. I chose 1 Dec 1998 as the end of the recovery period, which made little difference as to the result, as discussed below.

Results

The results of the analysis are shown in Table 2.2 below. In both equations, the threat is negative, and is strongly statistically significant (at the .01 level for regression 1 and .05 level for regression 2). However, as discussed above, this is consistent with both the public interest and public choice hypotheses, so we must examine the recovery period. Looking at the threat retraction coefficient, it is positive for both regressions, but not statistically significant from zero. This supports the hypothesis of strong rent extraction. This result is not surprising, of course, for if the theory of rent extraction is applicable in any case, tobacco would be a likely target with its high free cash flows. With profits such as these available, one would only expect increased government scrutiny.

Of the two slope shifter variables, the recovery period did show statistical significance (showing a negative change). Given the time frame of the recovery period, which included the collapse of the hedge fund Long Term Capital Management and subsequent severe capital market problems, this is not surprising. Tobacco stocks, with their more certain cash flows, are more attractive during a market crisis and inversely related to the market index during this period. The coefficient capturing the abnormal return of 9 Aug 1996 was strongly significant as expected, at the .01 level, and negative, reflecting the first ever health damages awarded against the tobacco industry.

Table 2.2

Regression Results: Tobacco RE (absolute t-statistics in parentheses)

	Regression 1	Regression 2
Constant	.0022749	.0023397
	(1.805)	(1.844)
Independent	, , ,	
Variables		
Market Returns	.9334811*	.8625288*
	(4.806)	(12.065)
Threat Event	0038676*	0035739**
	(-2.402)	(-2.203)
Shift in Market Returns	.2718056	
during Event	(1.229)	
Threat Retraction	.0015335	.0014774
(Recovery)	(.783)	(.745)
Shift in Market Returns	4468508**	
during Recovery	(-2.012)	
Abnormal Return	1417476*	141748*
	(-8.035)	(-7.908)
Adj. R ²	.2682	.2446
n	650	650
DW	2.13	2.13

Note: Dependent variable = returns to tobacco portfolio; * = significant at .01; ** = significant at .05

Conclusion

The controversy over tobacco and the proper course of public policy continues to this day. Many aspects of the debate are puzzling, for instance, if tobacco is as harmful as claimed, why not ban it? Why does the outrage over tobacco seemingly increase by the day, while the industry's behavior has only improved? These questions seem

public choice lenses seems to provide a clearer picture. Actions by bureaucrats are seen as improving their self interest, following the Niskanen model. Regulatory actions follow Stigler/Peltzman logic. Many groups pursue government favors to transfer rents to them, following Tulluck's rent seeking model. Every public choice model examined could be seen somewhere in the myriad actions of the tobacco debate. But the most important public choice issue considered was the rent extraction model—did it apply to tobacco?

McChesney's theory of rent extraction is strongly supported by the empirical data analyzed in this paper. McChesney's theory correctly notes the active role that politicians take; they are not mere brokers of favors as seen in the Stigler world. Mike Moore, Hubert Humphrey III, David Kessler and President Clinton all aggressively pursued the tobacco industry, and ultimately extracted rent for no action: money for nothing. The wealth lost to the industry was in some cases transferred to politicians (as in the increased campaign donations discussed earlier). But much was also dissipated, with lobbying costs incurred to avoid much of the extraction. In addition, the capital value of the industry itself was reduced given the political attacks on the reputation of the industry.

The tobacco issue would seem to be an ideal case study for rent extraction, given its large profits available. However, as noted, it is less than ideal to test, since the industry has been constantly threatened over the years. Nonetheless, the increased threat levels associated with the national tobacco bill were empirically verified using the McChesney methodology. The theory of rent extraction suggests that industries at risk

are more likely to reduce capital investment, as well as try to hide profits. In the case of tobacco we see some of these implications manifested, such as the tobacco industry expanding in less threatening overseas markets. In addition, the tobacco companies have merged with other food companies, in an attempt to both lower perceived superior returns and to provide a better overall image.

The theory of rent extraction also suggests a need to occasionally carry out threats, making future rent extractions more credible. In this case, some of the threats were carried out, and this has been well noted by other industries. The states attorneys general are now pursuing Microsoft, and many cities are pursuing the gun industry. Microsoft was previously known as apolitical, yet now they are funding both politicians and think tanks that support their point of view. The message appears to have gotten through.

One of the more interesting aspects of rent extraction mentioned in this paper is the need for political actors to vilify the industry prior to extraction. This should be more closely examined. For instance, Cisco Systems has large profit levels and just as much monopoly power as Microsoft, yet they have not been targeted heretofore. But they also don't have a well known billionaire running them--someone for Americans to envy. Is it just easier to extract rent if the company has a negative public image or is it a necessary condition? McChesney's original work did not discuss this, yet it seems to me to be important.

Another aspect to consider is the mix of rent creation/rent extraction. McChesney suggested that politicians would seek to equalize the returns between the two areas. As

empirical work continues to support the rent extraction hypothesis, we should turn our attention to the amount of each activity. Perhaps rent extraction is simply a target of opportunity—if an industry for some reason becomes more onerous publicly, and has positive rents—then a politician acts. But if the politician actively seeks out and creates the rent extraction situation, as McChesney argues and this paper supports, we may be able to identify the mix of political activities—how much of a politician's time is devoted to rent creation versus rent extraction. If we can, does membership on some committees support this better than others? Does one party extract more rents than another? How has rent extraction developed over time and across countries? These are all questions for further investigation.

Chapter Three
Class Action Lawsuits: Tobacco Litigation And Rent Extraction

Rent Extraction Applicability to Class Action Lawsuits

As discussed in Chapter Two, Rent Extraction theory suggests that politicians are not mere brokers between political interest groups, but are independent political actors with their own claims. Political office is seen as conferring a property right to impose costs—they are able to extract wealth by political extortion, by not imposing the costs. In McChesney's words, they get money for nothing. To make this threat effective, occasionally the politician must implement the threat. They can do this by increasing costs of production, either through taxation or regulation. They can also legislate price controls to lower the price a producer can receive. In either case, the politician is targeting the capital value of privately created rents.

But an examination of class action lawsuits leads to a similar model of extortion, not political but legal extortion. In this theory, trial lawyers have obtained a conditional property right to impose costs on corporations via the class action lawsuit.²⁰ They have obtained this right by passing the bar (whereby government restricts competition from others). As Leef notes (p. 1), "Every state except Arizona has an "unauthorized practice

²⁰ Note that these costs are independent of any actual settlement or judgment against the company, as the company necessarily must pay attorney's fees to defend against the suit. The suit may also create uncertainty in the financial markets concerning future profitability of the company, lowering its credit rating and thus increasing costs of finance.

of law" statute that makes it illegal for anyone who does not meet the requirements set by state bars to render legal assistance." This is necessary, according to many lawyers, to avoid "the most unwary, guileless members of the public being incompetently represented and advised, if not victimized and defrauded" (Leef, p. 1). More importantly, they have obtained this right through legal changes, most notably in 1966 to the Federal Rules of Civil Procedure. These changes allow trial lawyers to sue on behalf of an entire class of "victims" without obtaining their individual consent, rather it only requires "token plaintiffs" (Schonbrun, 1997, p. 50). In addition, class action status itself is to be determined independent of the actual merits of the case, an interpretation that was established in the 1974 Supreme Court *Eisen* decision.

The class action lawsuit itself, while allegedly offering benefits in terms of reduced litigation expenses for the legal system, increases the uncertainty for businesses, since a large adverse decision could put them out of business. Rather than "bet the business," most businesses prefer to settle out of court (Priest, 522). As Priest notes, this gives tremendous leverage to the trial lawyers, since the merits of the case do not matter in class action status, and juries may conclude that facts don't matter as well. As Texas' Attorney General John Cornyn states, "Even in the absence of proof, economic pressures are so great that an industry cannot afford to go to trial. They must, out of necessity, try to settle on the best terms they can" (Fund, p. 10).

Given this environment, trial lawyers have the legal right to threaten a company with large losses, which they will not carry out with a suitable up-front settlement —

²¹ As in the silicon breast implant case, Agent Orange, or Benedictin, see Hensler, pp. 107-108.

money for nothing. The costs of this extraction can be staggering for the economy as a whole. The American Tort Reform Association (ATRA) has estimated that overall tort costs (of which class actions are obviously just a part) are in excess of \$150 billion in the United States, and costs are increasing at a rate four times faster than the economy (ATRA, p. 1). While undoubtedly much of this cost is a transfer, much is also sheer waste. The opportunity cost of the legal system is whatever the judicial infrastructure (lawyers, judges, clerks, etc., time) could have produced if not involved with class action lawsuits. This makes an examination of this issue economically relevant, as well as academically interesting.

Some scholars have struggled with the question, "Does the act of certifying a class coerce settlement of frivolous or nearly frivolous claims?" (Willging, p. 59).

Indeed, as the pendulum has swung against class actions recently, "the fear that certification alone will be determinative of the dispute" has led several judges (sometimes openly) to more aggressively question certification (Priest, p. 523). When the Federal Judiciary Center asked this question, they were only able to suggest that class certified cases should settle more frequently if it is the class action status device that coerces settlement. In fact, they found that class action suits were more than twice as likely to settle as cases that contained class allegations but were never certified (Willging, p. 60). While this is undoubtedly a useful indicator, the theory of legal rent extraction may add to this story. As explained above, legal rent extraction posits that class action status is a

²² Indeed, in the *Rhone-Poulenc* case (hemophiliacs w/HIV tainted blood), the court denied certification since certification might force the defendants "to stake their companies on the outcome of a single jury trial, or be forced by the fear of the risk of bankruptcy to settle even if they have no legal liability." (Priest, p. 533).

property right to legally extract wealth. As outlined below, we can test this hypothesis empirically, with the methodology used in Chapter Two. One critical difference between legislative rent extraction and legal rent extraction, however, is that the legislature withdraws the threat upon extraction of the rent, whereas the legal rent extraction reduces significantly the threat, but the reduced threat *is* carried out, since that is the source of the rent that is extracted.

This questions whether it really is, as McChesney says, money for nothing. It also opens the door for a public interest explanation for settlement. Most trial lawyers suggest public interest reasoning in their advocacy of class action lawsuits. Much of their rationale is based on the required change in conduct on the part of the defendant, or on the ability to correct small harms to large numbers of people. Yet the anecdotal evidence often rejects this explanation. Schonbrun (1997, p. 51) provides an interesting anecdote, which seems to reject the public interest perspective.

"In 1988, class action lawyers sued the Mt. Konocti Water Company for overcharging lot owners on their water bills in a Lake County, California subdivision. The court ordered the water company to return \$1.2 million, but the company only had \$500,000 in assets. The real problem, however, was that the water company was self-insured and owned by the owners of the lots. As a result of the judgment, the water company went into bankruptcy, requiring it to pay over \$3 million in attorneys' fees for the settlement and a plan of reorganization. The original plaintiff received \$300 as a result of the class action settlement, but will owe \$6,000 for the cost of the reorganization."

In this example, the plaintiffs were also the defendants, thus there is no possible public interest story in the lawsuit. The only explanation for this lawsuit was personal remuneration to the class lawyers. Of course this is simply anecdotal evidence, and

surely there are a myriad of motives which drive class action lawsuits. Yet if the motive for securities lawsuits is, as is often stated in the public interest view, the shareholder, we should see these lawsuits as wealth creating rather than extracting. This proposition will be tested below.

Priest correctly finds it:

"Surely a curious circumstance in a country committed to the rule of law to accept the propositions (1) that class certification alone creates great negotiating power, (2) that that power leads to actual settlements, sometimes large dollar settlements, and, simultaneously, (3) that this great negotiating power can be created without any judicial review of a claim on the merits and, in some cases, without any merit to the claim (p. 547)."

While this is curious from a public interest point of view, from the theory of legal rent extraction, it makes perfect sense. One would expect that class action status would deliver significant benefit to the favored constituency, and this constituency would use it to extract rent, and this extraction would be beyond the review of the judicial system.

The theory of legal rent extraction goes far to explain the curious world we see around us.

Why Legislative vs. Judicial Rent Extraction?

After all, most rent extraction has, as its source, the legislator.²³ As mentioned above, the property rights conferred to lawyers were given by the legislature. Why would the legislature confer power of rent extraction to private citizens when they could conceivably extract the rents directly? In short, there are at least two reasons why they would delegate that capability. In McChesney's analysis, he suggests that legislators

²³ While I will concentrate on changes authorized by the legislature, it is surely true in our common law system that some judicial decisions facilitate rent extraction. Yet even in these cases, the legislature could overrule the judicial system, if there was enough political support. So in that sense all rent extraction ultimately comes from the legislature.

would be inclined to equate the benefits of rent creation and rent extraction at the margin (p. 22). This suggests that part of the reason may simply be that in some cases it is more advantageous at the margin to create rents for trial lawyers than to directly extract the rents themselves. Of course, trial lawyers have contributed handsomely to the Democratic party, which traditionally has been supportive of plaintiff's right to sue.²⁴

In addition, when private parties pay for the right to extract private rents, the extraction is one step removed from the political realm, making it easier for politicians to avoid blame in the aftermath of egregious verdicts. In many of these cases, it would have been impossible for the legislature to extract the rents directly because of political pressures. As Fund notes, "Several states—such as Alabama and California—whose legislatures explicitly rejected tobacco tax increases proposed by public health groups decided instead to impose a tax through the judicial branch, the courts, rather than the legislature" (p. 11). For particular taxes or regulation (as opposed to general tax or regulation policies), it is often necessary to demonize an industry or company for a political rent extraction to take place. Yet there are many companies/industries with sizable privately created rents that are not easy to characterize in this manner. Specific punitive legislation in these cases might cause an electoral backlash. Yet allowing private citizens to extract the rents through the judicial system may provide sufficient distance from voters with short memories—and still provide funds back to the politician.

Another issue that affects the question of this section is the distinction between state and federal legislatures. Up until now, my discussion has primarily focused on

²⁴ See note 5 in Chapter Two above.

federal legislation. But state actors have significant power to extract rent themselves, and motive as well. Consider a class action suit filed in state court against an out-of-state manufacturer. While it would likely be politically difficult for the legislature to attack the wealth of a specific out-of-state company, there is no such prohibition against the legal system. In fact, there are significant rewards towards extracting out-of-state wealth. As Tabarrok and Helland (1999) show, in states where judges are elected, there is evidence to support the claim that judges will transfer out-of-state resources to in-state recipients. The motivation is obvious, as noted by retired Judge Richard Neely:

"As long as I am allowed to redistribute wealth from out-of-state companies to injured in-state plaintiffs, I shall continue to do so. Not only is my sleep enhanced when I give someone's else (sic) money away, but so is my job security, because the in-state plaintiffs, their families, and their friends will reelect me." (Tabarrok, p. 157).

While the legislatures at the state level may have the desire to reward constituents directly, they may not have the capability. But judges do have such power, and given their incentive structure, especially for those elected, should be expected to exercise it. This may help explain the desire of most businesses to federalize tort reform, while most trial lawyers would like to keep it at the state level.

In legislative rent extraction, the legislator can threaten to either increase costs or to regulate the product to extort private rents. In legal rent extraction, the lawyer has similar capabilities, especially through the use of the class action lawsuit. On the one hand, it is obvious the lawyer can significantly raise the costs of doing business via the settlement fee. But many settlements also mandate changes in the business practices, regulating future activity. In fact, the lawyer's fees are often justified by how significant

the defendant's business practices have changed (Hensler, p. 278). Thus the class action lawyer is able to threaten both increased costs and regulation simultaneously. If the defendant chooses settlement, he will be able to negotiate for lower regulation and reduced costs.

This issue also lends itself to analyzing lawyers as an interest group, and how they interact with government. Epstein (1988) provides an initial review of lawyers as an interest group. He begins by noting that while it may be obvious that plaintiff's lawyers maximize their utility, defendant's lawyers do as well. In fact, both sets are interested in a set of rules which are complex, with much discretion, since this necessitates having a well paid legal staff to "navigate the legal waters (p. 313)." While defendant's lawyers may complain against excesses, as a group they accept the basic system. Likewise the legislature is an unlikely place for reform of the system, since any reform must begin through the judiciary committees, where lawyers once again dominate (Epstein, p. 313). If this theory is true, how has this situation arisen?

History of Legal Rent Extraction

This section will review some of the legal changes which have given property rights to trial lawyers enabling them to extract rents. There are many actors involved, with differing motivations. But a review of the history may show actions consistent with a public choice view—every character in the drama acting in self interest. While group action in legal matters is not new, and in fact has been allowed in limited cases for

hundreds of years, changes in the 20th century will be my focus. ²⁵ Specifically, I will begin with the birth of Rule 23 of the Federal Rules of Civil Procedure, which occurred in 1938. These changes were comprehensive, concerning civil litigation in general, but included major changes for class action suits. With the changes of 1938, there were three separate types of class actions: true, spurious and hybrid (Hensler, p. 11); the most important difference between these categories was whether the action would bind absent parties. According to Hensler (p.11), "only "true" class actions could bind absent parties. "Spurious" class actions bound only the class representatives and those absentees who explicitly chose to be bound. "Hybrid" class actions were binding on absent parties in some respects, but not all." Although the motivations driving this change are not known, the rules put in place would guide the course of litigation for over 20 years.

While class action rules are critical, other legal changes during this time period are also important. The right of contract was significantly reduced after 1960 as a result of a New Jersey Supreme Court case, *Heningsen v. Bloomfield Motors*, where contracts between buyer and seller involving harms caused by accidents were rendered unenforceable (Rubin, p. 2). The courts are now in the position of determining what the legal outcome will be, rather than the parties involved in the market transaction. This increases the uncertainty and therefore the costs of doing business. Courts have justified this nullification of contract under the "contract of adhesion" concept, where the parties may have unequal bargaining power (Rubin, p. 2). As Rubin notes, however, "Contract

²⁶ See also Epstein, p. 311.

²⁵ The historical discussion that follows is a summation of the historical development reviewed in the Rand Institutes' *Class Action Dilemmas*, and sources identified within that study.

terms are no different than other product characteristics. Firms can compete with respect to warranties and other contract terms, including safety guarantees (p. 2)."

With this understanding of the market economy, there is no real adhesion, as there are always alternatives. If enough individuals desire a given feature, the market will provide it. But with the courts providing the answer to what previously were contractual questions, class action suits have an additional weapon in their arsenal. Not only is the number of people wronged a weapon, but the uncertainty is also (whether or not a contractual mechanism will be allowed by the courts to determine whether a wrong has been committed). While this terminology of "weapons" and "arsenal" may seem overly aggressive, it fits the view of Judge William Becker, who said in 1976 that "From the judicial viewpoint, it appears that unremitting social and economic warfare (emphasis added) is being waged in the class action field (Resnick, p. 46)."

In 1960, the Chief Justice instructed his newly appointed advisory committee to look at all aspects of the Federal Rules, including rule 23. Resnick notes that class actions were a significant focus of the advisory committee, which ultimately led to a new version of Rule 23 (p. 8).²⁷ This significantly changed the legal framework for class action lawsuits—the most important change was to allow representative plaintiffs. Whereas previously individuals were specifically required to "opt in" the class action lawsuit, after the 1966 changes, they were assumed to be in unless they specifically opted out (Miller, p. 674). Since requiring positive action makes it less likely an individual will choose that action, we would expect few people to opt out after the rule change. The

²⁷ See Appendix D below for complete text of Rule 23.

Federal Judiciary Center's study bears this intuition out: less than .2% of qualified personnel opted out of the class actions they reviewed (Willging, 1996). A public choice analysis would argue these type of changes do not occur in a vacuum, and we should examine the incentives guiding those who pushed for the changes. A priori, I would expect to see self interest guiding this change, as well as guiding future efforts to "reform" the reform of 1966.

John Frank, a member of the Advisory Committee responsible for the 1966 changes to Rule 23 argues otherwise,

"...the race relations echo of that decade was always in the committee room. If there was [a] single, undoubted goal of the committee, the energizing force which motivated the whole rule, it was the firm determination to create a class action system which could deal with civil rights and, explicitly, segregation. The one part of the rule which was never doubted was (b)(2) and without its high utility, in the spirit of the times, we might well have had no rule at all.

The other factor is that 1964 was the apogee of the Great Society. President Johnson was elected with the most overwhelming vote ever, as of that time, achieved by anyone. A spirit of them versus us, of exploiters who must not exploit the whole population, of a fairly simplistic good guy-bad guy outlook on the world, had its consequences." (Hensler, p. 12).

Miller echoes this idea, "Hopes were great that the class action would prove instrumental in dispensing justice to socially or economically disadvantaged groups as well as to small claimants generally (p. 678). Perhaps this truly was the motivation. Yet as critics note, the bulk of the problems with class action lawsuits have to do with section (b)(3){which allows monetary damages rather than injunctive relief}, having nothing to do with traditional civil rights concerns. Kaplan responds that "This timid course {eliminating (b)(3)}was unthinkable in the face of the insistent need to improve the methods of

handling litigation affecting groups (p. 394). But Kaplan acknowledged that the changes could lead to increased litigation, but felt it was worth it to accomplish the goals of the rules changes (Resnick, p. 14). Miller also argues that the intention of the Advisory Committee was not to revolutionize or make major changes to the class action rules (p. 669). Nonetheless, that is exactly what occurred.

In Resnick's review of the records, she notes a differing reason, suggesting the committee was responding to judges' and lawyers' "impatience" with the confusing tripartite classification of class actions as true, spurious, or hybrid (Resnick, p. 8).

Although the changes eliminated the old language, they did allow for differing reasons to have a class action suit (see section b in Appendix D for the new language). But as mentioned above, the significance of these changes was allowing the establishment of class action status "without consulting the wishes of the absent parties, and the outcomes of the litigation are binding on all class members" (Hensler, p.14). Although individual rights were protected somewhat by the mandate to notify potential plaintiffs of their right to opt out, the change created a bias towards more suits. As critics noted, because the incentives to opt out in many cases were limited, classes were "almost certain to be larger—and the sum of their potential damages, therefore, much larger—than classes certified under the old rule." (Hensler, p. 15).

This change significantly increased the potential payoff of class action suits.

Economic analysis would suggest that lawyers would engage in all areas of legal activity until the marginal returns from each area were equal. This suggests that more lawyers would engage in class action suits after the changes in Rule 23. This is consistent with

Resnick, who argues that changes were explicitly made to "enable more cases to be certified as class actions (p. 9). Professor Kaplan, the reporter to the Advisory Committee which drafted the 1966 changes, noted that many of the critics of rule 23 (prior to the changes), suggested simply getting rid of it and returning to the rule prior to 1938—but the committee "thought that a further effort should be made" and the class action should be preserved (Kaplan, p. 386).

Even defenders of the 1966 changes, such as Miller, acknowledge that "It is true, of course, that the shift from an opt in to an opt out procedure has heightened the attractiveness of seeking damages (p. 674).²⁸ In fact, while empirical examinations of the impact of class action suits during the '70s did not show huge impacts on the legal system, they did show an increasing trend of class action lawsuits at an alarming rate (Hensler, p. 18). The class action lawsuits were generally given wide latitude by the courts during this early period, with comments such as "if there is to be an error made, let it be in favor and not against the maintenance of the class action" and the rule "should be given a liberal rather than a restrictive interpretation" representative of thoughts of the day (Miller, p. 678).

The additional lawsuits naturally caused great consternation in the business community. Critics suggested that attorneys were pursuing cases that had no legal merit just to generate fees, that benefits to the consumers were next to nothing, and that the Advisory Committee should revisit Rule 23 (Hensler, p. 15). William May, the chairman of American Can Company, said "we are fighting for our lives." (Hensler, p. 16). This

may seem like hyperbole, but the comment was supported by Abraham Pomerantz, then dean of the plaintiff class action bar:

"Everyone who deals with the public today is open to brand-new areas of litigation. This is driving many corporations to something bordering on hysteria. The big problem for them today is not so much increasing legal expenses—it's the enormously increased legal exposure. That class suit really strikes at the pocketbook. In some cases, the corporation's very existence is at stake." (Hensler, p. 16).

But as much as the changes of 1966 led to this result, Congress itself provided the real impetus for change. After the Supreme Court held that individual members could not add their monetary losses together to meet the dollar threshold requirement for a federal class action, Congress stepped forward in 1971 with full support of President Nixon—it was truly a bipartisan affair. The new legislation allowed for a minimum consumer loss of ten dollars in the case of unfair trade practices (Hensler, p. 16-17). Advocates for the consumer class actions, such as Senator Frank Moss, wryly attacked the criticisms, "Staunch defenders of the right to make a profit worry about profits for consumer's attorneys." (Hensler, p. 17). The individual states, whose policies regarding class actions typically follow the federal model, were quick to match the new federal rules.

Professor Miller, an assistant to the Advisory Committee's reporter (who was present for all the deliberations prior to the 1966 changes), argues that the changes made in 1966 are *not* responsible for the explosive growth in class action lawsuits. As he states:

²⁸ But he then argues that the same result would likely have occurred through some alternative

"In my judgement, Federal Rule 23 is being used as a convenient scapegoat for grievances against our civil litigation system and trends in our society whose roots lie far deeper than the procedural aspects under that rule. Accordingly...drastic revision of class action practice at this time, either by legislation or rulemaking, would be tantamount to attempting a cure by treating one symptom of an ailment rather than dealing with its underlying cause (Miller, p. 668)."

Miller argues that many societal changes were underway contemporaneously leading to the results seen in the class action field, "the changes actually reflect the demands of variegated societal pressures unrelated to rule 23... Given the nature of these forces, however, the situation would have been much the same...had rule 23 not been touched in 1966 (p. 669)."

The courts did engage in issues vastly different than previous periods, reflecting the concerns of that era. Many involved due process concerns, but in areas such as dress and hair codes, academic and government employment status, prisoner's rights, and welfare benefits. As Miller states, "the appearance of these cases reflects an intellectual revolution in the theory of entitlements and private rights that raged in the courts and law reviews during the late 1960s (p. 671)." Miller also argues that what is shaking the legal profession is not the class action itself, but rather the "big case" phenomenon which transcends the class action (Miller, p. 668). Because the incentive structure for plaintiffs' and defendants' lawyers as well as judges seems to favor big cases, Miller suggests the trend to big cases would have occurred even if the class action language in Rule 23 had not been changed. While Miller's arguments may be true, the class action lawsuit

(complete with the 1966 changes) gave a powerful vehicle to express those changing societal norms.

Miller correctly points Congress as another source of the changing nature of class action suits (as mentioned above). Congress passed many bills in the late 1960s which were conduits for social change via the class action lawsuit, including the Truth in Lending Act, the Fair Credit Reporting Act, and the Magnuson-Moss Warranty—Federal Trade Commission Improvement Act (Miller, p. 675). While these may not have been initially intended to facilitate class action lawsuits, they were quickly identified as a vehicle for both social change and rent extraction. In some cases, however, Congress was explicitly trying to remedy perceived deficiencies in the class action lawsuit. As Miller notes, the Truth in Lending Act was subsequently amended to "limit damages in class actions under that Act to the lesser of \$500,000 or one percent of the creditor's net worth (p. 683). In this case, according to Miller, it was clearly Congress' intent to maintain the class action vehicle itself, while limiting the overall damage (rent extraction) that could occur to the defendants involved (p. 683). Miller cites numerous other examples of Congressional action of this type during the early 1970s.

While Congress was making changes affecting class action lawsuits, they were not alone. The Supreme Court, in the *Eisen* case of 1974, ordered that plaintiff attorneys had to pay the costs of individual notification to all prospective class members. This decision was seen by some as limiting the class action suit. If the lawyers were forced to pay the significant notification fees up front, with no certainty towards recovery, it was thought that only very large firms would have the capital necessary to fight with class

action suits (Hensler, p. 20). This, in effect, was potentially a change in the "property rights" established in 1966. A public choice examination would not expect this change to take place without resistance, and in fact, consumer advocates and judges argued for changes to the rules. The Advisory Committee on the Civil Rules recommended to the Judicial Conference that Congress give statutory guidance on small damage claims (Hensler, p. 20). This was supported by the Carter administration, who proposed to "provide a new statutory basis for consumer class actions brought under federal law, and to do away with Rule 23 (b)(3) entirely" (Hensler, p. 21). Unfortunately for plaintiff's lawyers, the Carter administration plan fell victim to the Reagan victory of 1980—and Ronald Reagan was not interested in improving the ability to file class action suits.

Perhaps more importantly, the *Eisen* decision also eliminated judicial review of the underlying case prior to class certification. This was an important part of the initial impetus for change, which would hopefully reduce the abuse of the system. As Kaplan states (p. 390), "The new provision (rule 23 changes of 1966) invites a close look at the case before it is accepted as a class action and even then requires that it be specially treated."

While all this was going on, demographic changes in the legal profession were also impacting the class action field. According to Miller, the no-fault principle reduced the need for lawyers in such areas as auto accidents and domestic affairs. This naturally leads to a transfer of lawyers to potentially more remunerative fields, such as the "growth industry" of class action lawsuits (Miller, p. 675). In addition, Miller notes the tremendous increase in total law school graduates during the 1970s. All of these new

lawyers have to engage in some legal practice, and the growing opportunities in class action lawsuits seem a likely destination for some of these graduates.

As mentioned above, Miller also argues that much of the explosion in litigation is due to the American society's fixation with the "big case," which transcends the class action (p. 668). This is supported by the transition of virtually all states to a comparative negligence standard, replacing the contributory negligence standard. Under contributory negligence, if an injured party is personally negligent in some way, he has no recourse to sue, even if the other party was 99% responsible. Comparative negligence, on the other hand, allocates damages in proportion to each party's amount of negligence—it is no longer "all or nothing". Under this standard, if an injury is caused 99% by the victim, and 1% by a "deep pockets" corporation, that corporation can be held responsible for 1% of the cost of the injuries, plus any punitive damages (where allowed). Naturally, this trend towards comparative negligence opened the doors to many lawsuits that would have been implausible under a contributory negligence standard. In one analysis, Low finds that the liability rule is a significant determinant of both litigation strategy and expected award amount (p. 537), with the comparative negligence standard leading to higher awards and higher probability of retaining a lawyer (Low, p. 538). This change, in concert with class action changes, helps to explain the tremendous explosion in litigation over the last 40 years.

In the free market era that followed Reagan's victory, however, "tort reform" generally was the topic of choice, not improving the class action system. As Hensler notes (p.22), "the business community, which had led the charge against class actions,

had turned its attention to substantive legal reform—the package of proposed limitations on jury awards, including punitive damages". This focus turned back to class actions with the "mass tort" cases. Agent Orange was the first successful mass tort case, breaking through the previous idea that class actions were an inappropriate tool for mass torts. The individual differences in exposures and damages were thought to be far greater than common features. As the advisory note to Rule 23 states,

A "mass accident" resulting in injuries to numerous persons is ordinarily not appropriate for a class action because of the likelihood that significant questions, not only of damages but of liability and defense to liability, would be present, affecting the individuals in different ways. In these circumstances, an action conducted nominally as a class action would degenerate in practice into multiple lawsuits separately tried. (Hensler, p. 24).

Despite this advisory, the Agent Orange settlement occurred in 1984 after a trial judge and appellate court upheld class certification. This was followed by the first asbestos class certification in 1986, and the floodgates opened after this. Asbestos itself proved to be especially difficult for the judicial system, and Chief Justice Rehnquist tasked a special committee to look into the issue (Hensler, p. 25). This ultimately led to the Advisory Committee being asked to once again review Rule 23.

The Advisory Committee turned to the American Bar Association (ABA) for a report on Rule 23, which recommended radical changes in the class action procedure (Hensler, p. 25). As might be expected, the ABA report was designed to facilitate class action status of mass torts, but it would also support class certification of other civil

litigation (Hensler, p. 26).²⁹ This expansion would likely result in increased remuneration for legal services, and the ABA could certainly be counted on to support that result. However, the wheels of justice grind slowly, and as more and more mass tort cases came to the fore (silicon breast implants, hemophiliacs with HIV, as well as tobacco) the rules were still debated. In the meantime, the Republicans had won control of Congress, and tort reform was part of the "Contract with America." Instead of trying to facilitate mass tort class actions, the Committee was increasingly more interested in curbing class action abuse (Hensler, p. 28).

In late 1995, new rules were discussed which would have the effect of significantly restricting class actions. The rules included adding a requirement that class certification was not only superior, but necessary to the adjudication of the case. The changes also required a judge to consider the likelihood of success of the case, and offered interlocutory appeal of class certification. These changes were reviewed in early 1996, with the intention of forwarding them to the Judicial Conference Standing Committee on the Rules. If the Standing Committee approved, the rules would be subject to an official comment period.

These changes were destined to fail, however, as critics rose in opposition to any change in the class action rules. As Hensler notes in footnote 109 (p.45), various alternatives were proposed which excluded the necessity element, diminished the extent to which judges would be asked to assess the probable success of class action, etc. In other words, every proposed change was attacked by one critic or another. As discussed

²⁹ In fact, as one would expect, both the ABA as well as the American Law Institute (ALI) have

above, if legal rent extraction is a property right, any changes to the property rights structure should be expected to be fought, and that is exactly what occurred. In anticipation of the resistance to change, the committee also prepared a default "minimalist" approach—which ultimately was accepted (Hensler, p. 30). Nonetheless, even this approach contained changes, and was vigorously opposed — every interest group was ready at the table, including corporations, bar associations, plaintiff or defense trial lawyers' associations, trade associations, consumer advocacy groups and other groups. Hensler notes that most of the proponents of class actions were opposed to *any* changes in the rules, arguing that many of the "abuses" of class action suits were overblown,

"..It is the history of class actions to 'take care of the smaller guy.'...

The assumption that recoveries of one hundred or several hundred dollars are 'trivial' is entirely unwarranted. For many low income class members ..recoveries of such amounts can make an enormous difference in the quality of their lives, while also providing them with a sense that justice has been done and that our system of justice works...

Few can dispute that class actions generally deter corporate misconduct so that honest business can compete. As a result, class actions also foster the confidence that is so necessary for a capitalist economy to function... (Hensler, pp. 32-33).

Opponents were not the only ones with strong points of view arguing before the Committee. As Miller argues, "rule 23 really must be thought of as a procedural skeleton requiring fleshing out by judges and lawyers experimenting with it in an ever-increasing range of circumstances and in a variety of innovative ways (Miller, p. 677). Many of the critics of class action lawsuits might agree with Miller, but say that is precisely the

[&]quot;enthusiastically endorsed aggregation of ... mass torts". See Resnick, p. 19, especially note 64.

problem—there is no certainty regarding this legal remedy, thus forcing businesses to capitulate rather than face unknown, potentially ruinous, decisions. Naturally the proponents of changes focused on the perceived evils of the current system, and forcefully argued that the current system must be changed:

What critics...miss, when they invoke social policy, is that lawyers' lawsuits (which the present Rule tends to encourage) are themselves a social evil. Such lawsuits result in expenditure for litigation costs of large sums of money that could be better spent on product or pricing improvements beneficial to consumers..

The class action has become "an opportunity for a kind of legalized blackmail." The courts have described class actions as "judicial blackmail" and "inducements to blackmail settlements"... "has become a racket—that is the simple truth of it."

The unpredictability of trial in the face of the claimed aggregate damages, as well as the cost of defense, ordinarily makes litigating to the end an imprudent alternative. The class action device provides disproportionate leverage in favor of the plaintiffs attorney, which is why almost no class actions ever get tried. (Hensler, p. 33).

Ultimately the Committee only went forward with interlocutory appeal, and the debate continues. As John Frank, a member of the 1966 Advisory Committee summed it up, "for all our efforts, we do not know whether the {class action} is a good or a bad thing. The great big question is whether the social utility of the large class action outweighs the limited benefits to individuals, the aroma of gross profiteering, and the transactional costs to the court system." (Hensler, p. 35).

While we may not know whether the class action is good or bad, we do know from the review above that individuals advocated or resisted the class action according to how it affected their pecuniary interests. And as Resnick argues (p. 21), the

overwhelming opinion within the legal profession has changed in the last 30 years from being overwhelmingly opposed to class certification of mass torts to a realization that "...and aggregate treatment of some mass torts in *federal* (emphasis in original) courts are essential." Of course (consistent with both a public choice and public interest view) to handle all this additional workload, the ABA, ALI and numerous other groups have recommended increasing the number of courts (Resnick, p. 45).

In addition to federal legal changes, which would permeate down to the states, the states themselves have changed rules specifically to assist their lawsuits against the tobacco industry. Florida was the first to change their rules in the mid 1990s, which denied the tobacco industry of its traditional legal defenses. But as Cherry explains, Maryland had an even more interesting change. Maryland's lead attorney, Peter Angelos, was initially losing the case against tobacco. To improve his odds, he petitioned the Maryland General Assembly to eliminate the industry's traditional defenses (as in Florida), in exchange for cutting his contingency fee in half. After the assembly did as he desired, Mr. Angelos requested the full 25%! This outraged Mike Miller Jr., the president of the Maryland state senate, "Mr. Angelos, in my opinion, agreed to accept 12.5 percent if and only if we agreed to change tort law, which was no small feat. We changed centuries of precedent to ensure a win in this case (Cherry, p.3)."

While the legislature creates the environment for most legal rent extraction, the trial lawyers themselves are capable of innovations to enhance their ability to extract rents. As Schonbrun (1996, p. 2) notes, ordinarily the trial lawyers' fees are deducted from a common fund held in trust for the class. But in the early 1990s, the trial lawyers

discovered that there was nothing illegal about their negotiating fees separately from the fund, and paid for by the defendants (Schonbrun, 1996, p.2). Why would attorneys desire this method of payment? There were at least three benefits: 1) fees did not have to be linked to any hourly formula, 2) fee negotiations were in private, with neither the public nor class members invited, and 3) the attorneys could claim that this method did not reduce the class award (Schonbrun, 1996, p. 2). The last benefit seems doubtful, since any agreement reached regarding the class award is conditional upon satisfactory resolution of the attorney fees, and the defendants undoubtedly consider this as they agree to any class award. Nonetheless, this innovation makes the class action lawsuit even more appealing to trial lawyers, and ceteris paribus we should expect it to lead to more rent extraction at the margin. In another case, after the Private Securities Litigation Reform Act of 1995 was passed (sharply curtailing federal securities lawsuits), trial lawyers simply changed venues and took their suits to state courts (Martin, p. i).

In addition to rule changes governing the procedures of class actions in general, trial lawyers may seek support of legislation affecting a specific case. In one such instance, rules were changed retroactively to benefit claims in the TWA 800 crash. President Clinton signed a bill reauthorizing the Federal Aviation Administration in April of 2000, which also included an amendment abolishing limitations on lawsuits set by the Death on the High Seas Act (Murray, p. 1). This will, for the first time, allow non-pecuniary damages such as the loss of consortium, pain and suffering, or the death of a child (Murray, p. 1). Although the bill was signed on 5 April, 2000, the effective date of this amendment was July 16, 1996, one day before the TWA 800 crash. The Association

of Trial Lawyers lobbied both Congress and the President, after giving large amounts of money (over \$2 million in the 15 months prior to the signing of the bill, mostly to Democrats) to federal candidates (Murray, p. 2). Although it will help in the TWA 800 case, it will also be effective in the EgyptAir Flight 990 and SwissAir Flight 111 crashes.

In another example, President Clinton submitted a provision in both his 2000 and 2001 budgets that would "end the federal tax deduction for punitive damage payments. This would mean that a company that fought a lawsuit and lost would pay punitive damages after taxes, but if it settled with the plaintiffs' bar instead of fought, it would be allowed to deduct any payments as a business expense (Fund, p. 10)." While this provision has not yet been enacted into law, it is obviously something which would, at the margin, encourage more settlement and thus more remuneration to trial lawyers. These examples show rent seeking used to facilitate rent extraction.

In some cases, rent seeking is used to preserve rent extraction. In one such case, in 1999, the Ohio Supreme Court threw out a three-year-old tort reform package by a slim 4-3 majority. According to the Ohio Citizens against Lawsuit Abuse, the four justices in the majority received over \$1.5 million in campaign donations since 1992, while the three dissenting judges received only \$70,000 from the trial bar (Bandow, 1999, p. 1). While no quid pro quo can be proven, the circumstantial evidence questions the judges impartiality, especially in light of the fact that since 1991 Ohio courts have thrown out legislative limits on lawsuits in fourteen separate cases (Bandow, p. 1).

This review of recent history has illustrated many different actors, using many different legal/political mechanisms, at different government levels, all in pursuit of legal

rent extraction. Rules have changed, laws have changed, and public opinion has changed. The result is an environment that allows legal rent extraction—a result that I will empirically test below.

Empirical Analysis

If class action lawsuits are legal rent extraction, one can verify it using the methodology of Beck, Hoskins and Connolly.³⁰ A threat of rent extraction (announcement of a class action lawsuit) would result in an initial drop in market capitalization. While it would be preferable to use actual class certification, it is likely the market would anticipate the probability of actual certification and most price action would occur upon the initial threat.³¹ Thus it seems more appropriate to use the first reported date of a class action as the event to study. Announcement of settlement would require that market capitalization not return to its original level—either go up by not as much as the original drop or not change at all, reflecting the rents that were extracted.

While one would a priori expect the legal rent extraction hypothesis to closely fit the "bet the business" mass tort cases, my initial investigation will examine securities class action suits—for two reasons. First, if it reveals statistically significant rent extraction, this would be more compelling towards the general theory, since mass tort class action suits would only be more likely to settle (due to possible bankruptcy). As Priest notes, "The single most salient feature of the modern mass tort class action is the extraordinary power that derives from certification of a class alone (p. 521). Priest adds,

³⁰ See also Eckbo and Weir.

This is especially true since the requirements for class action status (typicality, numerousity, commonality, adequacy, etc, see Resnick, p. 25) are more easily met with securities class actions than with other types (such as mass torts, where damages vary greatly).

Commentators unanimously concede that virtually every mass tort class action that has been successfully certified has settled out of court rather than been litigated to judgment. For any subset of cases, uniform settlement and zero litigation is an extraordinary empirical fact, neither predicted by nor consistent with *any* (emphasis in original) current economic model of litigation and settlement. It is reflective of the huge uncertainty and, therefore, the risk that attends judgment of a mass tort claim by a lay jury (p. 522).

However, in most cases of securities class action status, defendants are not forced to settle because of "bet the farm" consequences; it is simply more cost effective to settle than to fight. This is due to a wide variety of factors, but as Heberlein notes, these include:

- (1) A company is not covered under directors' and officers' liability insurance if it loses a court judgment. Hence, companies often capitulate early, even though they believe their side is right.
- (2) Parties on both sides can be tied up in pre-trial interviews, taking up valuable executive time that could be used running the business.
- (3) A jury is selected because of its lack of business knowledge. It then must sort complex business data in an arena in which the poor little retiree stockholder is battling the very captains of industry. (Heberlein, p. 2).

In addition, as mentioned above, public interest explanations require the shareholders to benefit from the suits. If rent is extracted, however, and not returned at the culmination of the suit, public interest explanations are less compelling. Now it may be asserted that many of the securities suits are to support a particular set of shareholders (such as those that bought the equity in some period of time). But if it is a true public

interest story, it should also benefit other shareholders--since it will ostensibly lead to changes in behavior that improve shareholder value in the future.³²

Schonbrun (1997, p. 55) provides another interesting anecdote opposing the public interest explanation of securities class action suits:

"...lawyers in 1993 settled a derivative suit brought in the name of Oracle Systems Corporation shareholders for no monetary payments. But they sought \$750,000 in attorneys' fees from the corporation in whose behalf they sued. When the court asked why the corporation received no money as part of the settlement, the lawyers explained that because of an indemnity agreement between the corporation and its directors, any recovery against the directors would actually be paid by the corporation. That, they argued, made further litigation a hopeless drain on corporate assets. In awarding attorneys' fees, Judge Vaughn Walker wryly noted, "if derivative plaintiffs' counsel actually believed this argument, then they should never have brought this lawsuit in the first place. Derivative plaintiffs knew of Oracle's indemnification policy when they filed their lawsuit and were equally capable of conducting their cost benefit analysis at that time."

While this anecdote is interesting, and tremendously supports the public choice explanation, what is required is a detailed empirical analysis.

Empirical Testing of Legal Rent Extraction

If the class action lawsuit is best modeled as an rent extraction, then it is possible to test the model empirically. The following discussion repeats the methodology used by Beck, et al (1992). Testing of the rent extraction model assumes that stock markets are efficient³³ and that prices reflect the present discounted value of future cash flows.

³³ In the semi-strong fashion, whereby all publicly available information is known and factored into the price of the stock.

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³² Given efficient markets, if the company had procedures that could conceivably injure shareholder interests, it would be reflected in the price of all shares, not just those previously injured. The logic is if they could do it once, they could do it again. Removal of this ability would result in higher present discounted value of future cash flows and thus a higher stock price.

Hypotheses

Analogous to the political extortion discussed in Chapter Two, public interest explanations may lead to threats levied against businesses that are subsequently retracted. However, the stockholder should be no worse off than when he started, if the public interest story is to be accepted. However, under the public choice rent extraction explanation, we should find that some wealth has been extorted from the stockholder. Following Beck, et al, four hypotheses are proposed to test for legal rent extraction. The first three hypotheses are consistent with the rent extraction explanation, while the first and the fourth are consistent with a public interest perspective.

Hypothesis I: Upon market recognition of an unexpected legal threat, the price of a company's stock will drop, reflecting the market's perception of lower future cash flows. This results in an abnormal negative stock return during the event period (defined below). This hypothesis is required for either the public or private interest explanation (explaining the subsequent retraction).

Hypothesis IIA: A retraction of the legal threat will not affect the stock price of the company in question; the stock price will reflect a normal return. This hypothesis is the strong form of rent extraction, with the retraction having no effect on the stock price due to 1) the litigant was able to extract all the rent or 2) the market believed that a payoff was certain (at the time of the original threat), and the threat would not be carried out.

Hypothesis IIB: A retraction of the legal threat will result in an increase in the stock's price, an abnormal high return. However, the increase will not be as great as the initial

decrease, reflecting the rents that were successfully extracted. This is the weak form of rent extraction.

Hypothesis IIC: A retraction of the legal threat will result in an increase in the stock price of the company in question, with the increase at least offsetting the initial decrease. This hypothesis supports the public interest view.

The empirical examination will first examine if a legal threat results in an abnormally low stock return. If there is, I will test if there is an abnormally positive return on the subsequent retraction. If not, the rent extraction hypothesis (strong) is confirmed. If there is an abnormally strong positive return, I will compare the magnitude of the positive return to the initial decline. If it is less than the initial decline, I will fail to reject weak rent extraction. If it is approximately equal, I will accept the public interest hypothesis.

Data and Methodology

To test the rent extraction theory, I acquired data on unexpected legal threats. Following the methodology of Beck, et al, I examined the public records for separate incidents of class action lawsuits filed against publicly traded companies due to decreases in the price of the securities. Although most class action lawsuits lead to settlement, I needed to find cases that had already settled, so that I could test both the effects of the initial threat, as well as the retraction. The initial identification of class action lawsuits (cited by most of the articles I reviewed), is the Securities Class Action Alert, a monthly newsletter which summarized securities class action lawsuits.³⁴ From the cases I

³⁴ SCAA, The Authoritative Report on Shareholder Litigation, http://www.irbc.com/

reviewed in several month's newsletters, I searched both the lexis/nexis database as well as the Dow Jones interactive business news section to identify companies that had been threatened with legal extraction via the class action lawsuit and subsequently settled. In addition to these sources, National Economic Research Associates (NERA) provided an email list of companies which had settled class action suits. From this review, I identified 30 separate cases to investigate. The only requirements for inclusion in my analysis were that the company had sufficient data points for an event study (many initial public offerings (IPOs) did not meet this criteria) and were listed on a stock exchange for both the threat and the retraction period (some companies subsequently went bankrupt and were delisted from the exchange prior to settlement). A list of the companies with the threat date and retraction date is in Appendix B.

The date used for the initial threat was the first publicly reported discussion of a securities class action lawsuit, or the actual date it was filed, whichever occurred earlier. Since I assume efficient markets, this should ensure that the market would quickly incorporate the threat into the stock price. The threat retraction date was a bit trickier, as many dates could potentially be used. I chose to use the first date where an initial estimate of the proposed settlement value was included. In most cases, this would be the result of a company announcement, significantly prior to an actual court approved preliminary or final settlement. In many cases, the final actual value would be different from that initially announced. Nonetheless, it seems likely that markets are able to include a risk factor for the probability of final settlement, especially since the initial agreement did indicate a range that was acceptable to the litigants. In a few of the cases,

I did not find an announcement from the company, and instead used the preliminary court settlement date.

To empirically test the theory of legal RE, I used the methodology of Beck, et al, as follows. I estimated coefficients to the following regressions:

$$r_{i} = \alpha_{i} + \beta_{i}rm + \beta_{i}rmd + Y_{i}d + E_{i}$$
 (1)

$$r_{i} = \alpha_{i} + \beta_{i}rm + Y_{i}d + E_{i}$$
 (2)

where

- r_i = a vector of daily, continuously compounded returns to the company or industry –sector portfolio;
- β_i = the coefficient that expresses the influence of the daily, continuously compounded returns of the S&P 500 index;
- rm = a vector of daily, continuously compounded returns to the S&P 500 during the estimation period;
- β'_i = the coefficient that expresses the influence of the daily, continuously compounded returns of the S&P 500 index on the variability of r_i during the event period;
- Y_i = the coefficient representing the average one-day abnormal return to a company or portfolio during the event period;
- d = a dummy variable, equal to one during the event period and zero otherwise;
- E_i = a vector of daily random disturbances, assumed to be independent of rm and d, serially uncorrelated and distributed multi-variate normal with mean zero and constant variance.

The rational for testing two equations is that the additional term in equation one, β_i , is intended to capture any systematic change to relative risk during the actual event period. Following standard event study methodology, I gathered data on stock market valuations for an estimation window that precedes the actual event (the threat), during the event window (surrounding the threat) and also a post event window. The event window

will include 3 different periods, with the standard (-1, 1) window included. Since I assume efficient markets, any changes (threats/retractions) should be quickly captured by the stock price. As Beck, et al, summarized, current literature suggests any changes in stock prices based on new information are quickly reflected after the change in information, with most of the change occurring within fifteen minutes of the announcement. However, following standard event study methodology, I also used two longer windows as well. These are less likely to reliable, since the longer window may include some of the dates where the stock price dropped enough to initiate the class action lawsuit. A priori, I would expect the larger event windows to generate a larger abnormal return, although I would give the longer windows less credence in support of the legal rent extraction hypothesis.

The results from the regressions are summarized to generate a cumulative average abnormal return (CAAR) for each event period window, as follows:

$$CAAR_{D} = \underbrace{D}_{N} \sum_{i=1}^{n} Y_{i}$$
 (3)

Where D is the duration of the event period and N is the number of cases. To test the hypothesis that CAAR = 0, the following Z statistic will be used:

$$Z_{\rm D} = \frac{1}{\sqrt{N}} \sum_{i=1}^{n} [Y_i / SE_i]$$
 (4)

Results

The results for the 30 cases studied are shown in Tables 3.1 and 3.2 below. Table 3.1 shows the results of the threat itself, and Table 3.2 shows the results of the retraction, or legal settlement (actual summary data used to generate these tables are in Appendix C). As seen in Table 3.1, the data strongly support the hypothesis of a negative abnormal return upon initiation of the threat (class action lawsuit). For each event window, and for both equations, the Z statistic is easily significant at the 99% confidence level. As expected, the size of the abnormal return increases as the event window expands. However, the larger two event windows should be viewed more skeptically, since they likely include some of the negative returns which caused the initiation of the class action suit. Therefore, I will base my conclusions on the (-1, +1) event window alone. The results also show that most of the individual cases showed a negative return, with 70% of the cases being negative for the shortest window.

Table 3.1

Threatening Actions					
	Duration of Event Period				
	(-20, +10)	(-5, +3)	(-1, +1)		
Equation (1)					
CAAR (%)	327	2055	075		
% of cases negative	63.3	70	70		
Z statistic	-5.73*	-6.49*	-6.01*		
Equation (2)					
CAAR (%)	31	185	107		
% of cases negative	63.3	70	70		
Z statistic	-5.7*	-6.81*	-6.99*		

^{*}Significant at 99% confidence level

While the results of Table 3.1 strongly support the hypothesis of legal RE, as discussed earlier, they could also support the public interest hypothesis. To determine which hypothesis really is supported, we must review the data in Table 3.2. First, is there a statistically significant positive return (CAAR) after the threat is retracted? If so, is the magnitude of the return equal or greater than the initial negative return from Table 3.1? As seen in Table 3.2 below, the Z statistic is not statistically significant at the 95% confidence level for any of the event windows or either of the regressions. With the two shorter windows and equation two, the data are significant at the 90% level. Yet even these cases have a positive CAAR far smaller than the initial negative return. This supports at least the weak rent extraction hypothesis (II B above), with the bulk of the evidence supporting the strong rent extraction hypothesis (II A above). In addition, we see roughly half the cases having positive returns, with no clear support of an abnormal positive return (especially with the preferred {-1, +1} window). Comparing equation 1 (with slope shifter) with equation 2, there is no difference in the overall conclusion (both support the legal rent extraction hypothesis). However, the simpler specification (equation 2) does lead to slightly higher statistical significance of the CAAR, although not enough to change any conclusions. While the numbers changed slightly, there does not appear to be any change in systematic market risk that occurred during the event windows investigated.

Table 3.2

Threat Retraction					
	Duration of Event Period				
	(-20, +10)	(-5, +3)	(-1, +1)		
Equation (1)					
CAAR (%)	.027	.066	.0024		
% of cases negative	50	60	47		
Z statistic	175	1.1	087		
Equation (2)					
CAAR (%)	.0132	.065	.0136		
% of cases negative	50	63.3	53.3		
Z statistic	151	1.63***	1.42***		

^{***} Significant at 90% confidence level

Government Sponsored Litigation

In an innovative use of legal pressure analogous to the class action lawsuit, States' Attorneys General have recently embarked on a new approach to regulation, bypassing the legislative branch through the use of lawsuits filed by private attorneys under a contingent fee basis. This has been effectively used against the tobacco industry to accomplish goals that never could have been implemented via the legislature (Regulation, p. 3) due to political realities. In addition, as Olson points out (p. 3), the Government Sponsored Litigation allowed for "voluntary" agreement to change business practices, which could be challenged for constitutionality if mandated by law (such as restrictions in advertising). While the tools used by the Attorneys General were not class action suits, their effect was much the same. As Texas' Attorney General John Cornyn states:

These are not suits that are made to be tried. None of these suits were brought to a conclusion. Rather than resting on established legal theories

of causation and damages, these cases presented novel legal theories. These cases were based on a coercive power that is similar to that seen in private class action lawsuits: they cannot be tried because the ramifications of an adverse decision would be catastrophic. The defendants make the only decision they can—they figure out how much it will cost to buy off a lawsuit and then they purchase their peace (Regulation, p. 34).

In this section, I will explore the outcome of the Government Sponsored

Litigation with tobacco, to determine whether the lawsuits are primarily initiated to
support the "private" or "public" interest. In the Manhattan Institute conference on this
subject, several proponents of the public interest point of view defined what this means.

As Attorney General Spitzer said, "I would never enter into an agreement with the
plaintiffs' bar on a contingency fee basis to give away billions of dollars. But that has
nothing to do with the tobacco settlement. The tobacco settlement has to do with public
health (Regulation, p. 7)." Many of the proponents of the tobacco litigation demanded
money for purposes related to smoker's health: education programs, smoking cessation
programs, etc. On the private interest point of view, many opposing the tobacco
litigation suggested it was all about the money: governments wanted an indirect way to
raise taxes and initiate new spending as well as pay off favored constituents (trial
lawyers).

To determine which view represents reality, I will review the actual uses of the new tobacco money on a state by state basis. If the public choice point of view is correct, the bulk of the money would go to fund activities having nothing to do with tobacco or

³⁵ Or in the "tell us how you really feel" category, Yale Law School's John Langbein said, "These are not real lawsuits. They are taxes on industries by well-coordinated groups of predators. This one happened to

health. If Attorney General Spitzer's public interest view is right, most of the expenditures would support public health initiatives. While anecdotal evidence is already coming in supporting the public choice story (such as Los Angeles' desire to use tobacco money to pay for damages related to lawsuits against its police force), I will perform a comprehensive look across all states. States that participated in the settlement are examined, reviewing changes in health spending after the arrival of tobacco money.

Fortunately, the Campaign for Tobacco-Free Kids has given us a head start on this investigation. In their recent report, Show Us The Money, they provide a detailed review of each individual states' spending of tobacco settlement money. In addition, the Centers for Disease Control has published minimum recommended spending levels necessary to finance a comprehensive tobacco control program for each state (CDC, p. 1). It is therefore possible to examine and test the level of spending against the minimum necessary to assess the public interest roots of the tobacco settlement. As the CDC noted, the "approximate annual costs to implement all of the recommended program components have been estimated to range from \$7 to \$20 per capita in smaller States (population under 3 million)," and slightly less per capita as the size of the states increased (CDC, p. 1). This funding would include items such as community programs to reduce tobacco use, chronic disease programs, school programs, enforcement, statewide programs, counter-marketing, cessation programs, surveillance and evaluation, and administration. Each of these areas had specific recommendations for spending by the CDC, typically between 20-25% of total annual tobacco settlement money. In

addition, the CDC established a "minimum" standard of funding for each state, which is less than the 25% suggested.

If the public interest explanation of the tobacco Master Settlement Agreement is correct, and the issue was all about improving the public health, then the states would use the settlement money to create and maintain programs that actually reduce smoking. As the CTFK notes, both the Institute for Medicine and the Surgeon General have recently released reports highlighting the effectiveness of the existing limited tobacco prevention programs (Show, p. ii). The funding provided by the Master Settlement Agreement would easily support this type of program nationwide, and still leave at least 75% for other urgent government needs. If, on the other hand, the purpose of the settlement was not to improve public health, but as suggested by public choice considerations, to provide politicians funds for desired spending, we should see little of the money actually go towards public health considerations.

To test the public interest hypothesis, I chose to set up a simple one-tailed t test. The null hypothesis is that the states spend 100% of the CDC minimum required spending (which, again, for each state is something less than 25% of their tobacco settlement revenues).

 H_0 : $\mu = 100\%$ of CDC minimum (public interest) H_1 : $\mu < 100\%$ of CDC minimum (public choice)

With a Z statistic of:

$$z_0 = \frac{X - \mu}{\sigma / \sqrt{n}}$$

I reject the null hypothesis if $z_0 < -z_\alpha$. For $\alpha = .01$, $-z_\alpha = -2.33$, so if the critical z value is less than -2.33, I will reject the public interest hypothesis in favor of the public choice hypothesis. In the CTFK study, six states and the District of Columbia had not yet made decisions regarding their initial spending of tobacco money. Given that vast preponderance of states that have spent far less than the CDC minimum, I thought it safe to assume they would all vote to fund no more than 100% of the CDC minimum (which is vastly more than other states). Using the data from the Table 3.3 below, I calculated the actual z statistic as -50.8, well below the required -2.33, therefore I reject the null hypothesis in favor of the alternative hypothesis.

 $^{^{36}}$ Alternatively, one can simply leave out the 6 missing states, and perform the calculation. This only strengthens the result, with the z statistic = -51.45.

Table 3.3
State Spending on Tobacco Prevention

State	% of CDC	State	% of CDC
	Minimum		Minimum
Alabama	22.4	New Hampshire	27.5
Alaska	17.3	New Jersey	41.3
Arizona	124.2	New Mexico	16.4
Colorado	53.8	New York	31.3
Connecticut	4.7	North Dakota	0
Delaware	32.8	Ohio	97.2
Florida	56.1	Oklahoma	28.9
Georgia	37.1	Oregon	40.2
Hawaii	89.5	Rhode Island	23.3
Idaho	10.9	South Carolina	7.3
Illinois	44	South Dakota	19.6
Indiana	100.6	Texas	8.7
lowa	48.3	Utah	39.4
Kansas	2.8	Vermont	82.2
Kentucky	23.1	Virginia	33.7
Louisiana	15.1	Washington	45
Maine	168	West Virginia	41.3
Maryland	99	Wisconsin	75.4
Massachusetts	137.3	Wyoming	12.2
Michigan	0	Arkansas	100
Minnesota	122.3	California	100
Mississippi	165	D.C.	100
Montana	37.4	Missouri	100
Nebraska	52.6	North Carolina	100
Nevada	22.5	Pennsylvania	100
		Tennessee	100
Mean	56.033	Standard Error	6.177

This data provides strong support to the public choice hypothesis that the purpose of the states' pursuit of the Master Settlement Agreement was to provide an additional source of revenue for state legislatures. As the CTFK report notes, "The tobacco settlement has resulted in an increase in the amount of money being spent at the state level on tobacco prevention and cessation, but the numbers are woefully short of what the

CDC has concluded represents the absolute minimum necessary to fund a truly effective, sustained comprehensive program (Show, p. I)." In light of this, trial lawyer Richard Scruggs' advocacy of the public interest view seems suspect: "We took tobacco on because it was a public health matter. We did not take this case for fees, nor did we intend to raise taxes, or put the state in partnership with tobacco (Regulation, p. 47)." This may indeed be the motivation, but the result was just the opposite: the analysis above strongly suggests that health was *not* the major concern (at least for those that allocated the tobacco revenues), the trial lawyers did receive enormous fees, in effect cigarette taxes were raised, and the agreement has cartelized the industry with the state as the enforcer.

Tax Farming

While the Government Sponsored Legislation certainly has been innovative from a regulatory respect, if one considers it from a revenue raising perspective, it seems rather similar to a practice of centuries ago—tax farming. One can consider the selection of trial lawyers that the states hire to sue the tobacco industry on a contingency-fee basis analogous to governments hiring tax collectors. The tax collectors were given exclusive license to tax citizens, while any extra tax collected (above what the state required) was the property of the tax collectors. There are many reasons why this practice was used in ancient times, and reasons why up to now it has been discontinued. I will review these issues below and consider the implications of this policy in light of the Government Sponsored Legislation.

Prior to considering the application of tax farming to tobacco, it may be useful to summarize the rationale and history behind tax farming.³⁷ Webber and Wildavsky outline the history of tax farming, noting that prior to its initiation in the 4th Century BC, governments were forced to hire both tax collectors and inspectors (who made sure the collectors didn't cheat the state) (p. 113). This was seen as an inefficient way to collect revenue, and governments subsequently turned to a much simpler method: tax farming. In Athens, for example, private businessmen were allowed to bid on the right to collect taxes. The state was paid half the bid up front, with the remainder due at the end of six months. In addition to the deposit, severe penalties were imposed if the businessman failed to pay the 2nd installment. This effectively limited tax collecting to very wealthy individuals (Webber, p. 113). The benefits of tax farming were 1) elimination of state owned tax collecting infrastructure, 2) simplification of government distribution of resources, especially for distant provinces, and 3) the risk of insufficient revenues was transferred to the tax collector. In the case of more distant provinces, the tax farmer would accept government warrants on grain or money, thus avoiding the need to send grain hundreds of miles back to Rome, and then send a portion of it back to the province (Webber, p. 117).

But tax farming did have its disadvantages. First, the state necessarily lost some revenue, especially during good years—the profit of the tax collector was lost revenue for the state. Secondly, this weakened central government control over the local government, as the tax collector was the de facto government agent, who may have little or no concern

³⁷ The history outlined here is exclusively obtained from Webber and Wildavsky's *The History of Taxation*

over central government goals (Webber, p. 114). Tax farming was seen as effective for a small or weak state, or a loosely linked, far flung empire (Webber, p. 117).

The tax farmer himself obviously benefited by his participation, but usually less than is commonly believed. Webber notes that in a *good* year a tax collector might earn more than 12% on invested capital (the going rate of return), suggesting that normal years provided normal remuneration (p. 115). Furthermore, if the tax collector tried to cheat the populace, and word got back to the government authorities, the tax collector would not have his contract renewed the next year (Webber, p. 115). This aspect, however, was much harder to enforce in distant areas, which helps to explain why only the Asian province (of the Roman Empire) consistently produced excess revenue to the tax collector (Webber, p. 117). As might be expected, while it was technically illegal for Roman Senators to participate in the tax collection, some were able to secretly, through unregistered shares in tax-farming companies (Webber, p. 118).

So with this cursory review of tax farming, how is the tobacco situation similar? Superficially, the basics are the same: the government selects private agents to seek additional revenue for the state, with the private agent able to take a portion of the amount collected. But the rationale for this arrangement is completely different from that of ancient times. First consider the benefits to the state (of tax farming). The initial impetus for tax farming was to reduce government tax collecting infrastructure; yet in the case of tobacco, none of the existing infrastructure is reduced, only an additional layer added. As many of the critics of the tobacco deal pointed out, the state could have reaped

all of the revenue, without giving any to the trial lawyers, simply by raising the rate of existing taxes. The second benefit to the state, simplified distribution of resources, is in no way found in the tobacco agreement (except to the extent one considers the distribution of resources to trial lawyers as a legitimate function of the state). The third benefit to the state, the assumption of risk by the tax farmer, is also not present—in fact, just the opposite as most of the trial lawyer's remuneration was paid up front, while the states must collect over 25 years.

The disadvantages to the state, however, are present with the Government Sponsored Legislation. The state loses income (equal to the contingency fee), and to some degree loses control over the regulatory process (as tobacco companies must consider trial lawyer' demands as well as government's). Webber noted (see above) that tax farming was appropriate for a small or weak state, or a far flung empire. But none of these descriptions (on the surface) are appropriate descriptors of the United States. So why would the states resort to tax farming? A closer view suggests the states *are* weak, and thus needed the assistance of tax farmers to collect the revenue. As Fund noted (p. 11), many of the state legislatures specifically voted against tax increases on tobacco, and subsequently turned to the Government Sponsored Legislation as a mechanism to increase the tax revenue. Given the practical difficulties of raising taxes (even on tobacco), one could argue that the states are weak, and without the tax farmers would have been unable to gain the revenue.

Another issue is how tax farmers are selected. As mentioned above, this was done through a competitive bidding process—although the process usually precluded all

but the very rich from participating. In the Government Sponsored Legislation situation, however, in most cases the law firms chosen were not selected through competitive bidding, but rather based on their familiarity with the Attorney General. Fund notes many states where the trial lawyers had unusual access to the process (pp. 12-14), one example is as follows:

In Pennsylvania, GOP Attorney general Mike Fisher freely admits that most large law firms contributed to his 1996 election campaign. When it cam time to picking law firms to help with the tobacco litigation "there was a familiarity factor" and "that was how the decision was made." (Fund, p. 12).

The lack of competitive bidding results in an amplification of one of the disadvantages of tax farming: the state will ultimately lose even more revenue. This is in addition to the obvious issue of favoritism which contributes to the public's cynicism of public actions. Defending his advocacy of competitive bidding, Columbia Law School Professor John Coffee says, "There is not that much conceptual difference between a contract to build a new airport... and to hire a plaintiffs' attorney (Fund, p. 12)."

Conclusion

The theory of rent extraction can be expanded beyond a model of political extortion to a model of legal extortion. Just as a politician gains a property right to extract wealth but can be paid not to, the trial lawyer has gained the property right (via changes in the legal system over the last 30 years) to extort wealth via the class action lawsuit. Empirical testing on securities class action lawsuits overwhelmingly supports this proposition. A public choice analysis would suggest that the beneficiaries of this legal rent extraction would resist any changes to restrict their property right, while those

having wealth extracted would fund "tort reform" efforts; in fact, we see both of these outcomes.

In something similar to the class action lawsuit, the Government Sponsored

Legislation has become a new innovation in extracting wealth from industries selling

legal products: tobacco was first, guns next, Microsoft, lead paint, etc. are in the cross

hairs. Once again, advocates of this tool claim public interest as their motivation. Yet

testing their claim in the case of tobacco, that it was all about "public health," shows that

we can reject their explanation with better than 99% confidence. Regarding the

Government Sponsored Legislation, one thing is certain, an enormous amount of money

was transferred to trial lawyers, whatever the motivation.

So what remains to be investigated? Further investigation should focus on extending the model of legal rent extraction, with additional empirical support. For instance, this chapter concentrated on securities class action lawsuits, since the public interest hypothesis was suspect in this area. Likewise, it seems there is virtually unanimous consent that "coupon" settlements also fail the public interest test, thus data could be gathered on this type settlement (which is increasingly uncommon due to the outrage over this device) and tested empirically with the methodology used in this paper. Legal rent extraction seems most appropriate when applied to the mass tort case. Yet, at first glance, the public interest hypothesis applies. Investigation should focus on methods to separate the legitimate public interest claims of the mass tort while identifying what portion is legal rent extraction, a difficult task to be sure.

Chapter Four A Process Analysis Of Changes in Tobacco Property Rights

Introduction

The tobacco industry has earned historically high returns for its owners, something that has not gone unnoticed by others in society. ³⁸ With its large free cash flows, the tobacco industry profits prove a tempting target for other members of society. In Chapter Two, we reviewed numerous actors that had in interest in the tobacco companies' profits, and empirically demonstrated that the industry lost wealth as a result of government threats, which were subsequently retracted. Tobacco companies, in the face of the threatening action, significantly increased their already large contributions to politicians. In a similar fashion, trial lawyers have attacked the industry through the class action lawsuit. These threats, when combined with the power of the state through the states' attorneys general, ultimately led the industry to agree to a multibillion dollar settlement, further transferring tobacco profits (and smoker's incomes) to other agents. Chapter Three suggested that the rent extraction theory of political extortion could be extended to legal extortion, with the trial lawyers use of the class action lawsuit the preferred instrument. These theories are in addition to the obvious use of "sin taxes" and

³⁸ According to Richard Kluger, the tobacco industry posted an average return on equity capital of 30 percent a year during the 1980s, the highest of all U.S. industries during that period. See Kluger, p. 615.

regular income taxes which reduce tobacco profits. Yet through all this, the tobacco industry continues to make money, despite the additional claims on its profits.

The profits of the tobacco industry are the legal property of the residual claimants, the shareholders of the common stock of the individual tobacco companies. This is no different, of course, than any other industry. But what is different, is the stability of the property rights associated with tobacco industry profits, which have been far more tenuous than with other more respected industries. With the tobacco industry, the property rights to its product have been under attack long before the recent efforts chronicled in Chapter Two. Opposition to tobacco has come first from church groups, with the Roman Catholic Church banning tobacco use in places of worship as early as 1575 (Borio, p. 2). Health opposition was noted at least as early as 1602, when the publication of *The Worke of Chimney Sweepers* identified soot in chimneys as a likely culprit for health detriments of chimney sweepers, and suggested tobacco may have similar effects (Borio, p. 2). And in 1604, King James I raised tobacco taxes 4,000% in an attempt to virtually ban the product. As Tatham states (quoted in Borio, p. 3),

"His majesty seems, however, to have advanced very substantial reasons for this virtual prohibition of tobacco; for if any circumstance can justify what are termed "strong measures" on the part of a government, certainly the wanton luxury and debauchery of its people must be amongst the best apologies for a stretch of power, which might, in other respects, have been deemed arbitrary, and unbecoming a British monarch."

Thus, even in 1600, measures were advanced against tobacco that would not be tolerated in other areas of commerce. Even more extreme actions occurred in Turkey in 1633: Sultan Murad IV ordered tobacco users executed as infidels (Borio, p. 4)! Although

many restrictions were levied on tobacco throughout the world after its discovery in America, these restrictions were often relaxed as some government leaders either become tobacco consumers themselves, or were remunerated sufficiently to give monopoly privilege (over the right to sell/import tobacco) to some subject.

In this chapter, I will examine the process of changes in tobacco policy. In section two, I will review three property rights frameworks, focusing on how those rights are initially created and how they change over time. While none of the theoretical constructs adequately describes the world in which we actually live, it will be useful to compare and contrast the different views with an alternate view of property rights. This alternative view of property rights will feature a process analysis that examines property rights in a dynamic context. Section three will look at a detailed history of government actions concerning tobacco, focusing on those actions which lead to a change in property rights and compare these actions with our posited model. Section four will discuss how these policy changes over time have led to a different allocation of tobacco profits.

Basis of Private Property Rights

Most reviews of property rights begin with John Locke, based on his classic work Of Civil Government, where he develops a natural rights framework for property. In this view, man owns the rights to the product of his own labor, and subsequently he owns the rights to the product of the mix of his labor and the commons. Locke develops this view based on a Biblical worldview, and begins with the historical outline in Genesis. While many consider this an excellent view of the origination of rights, it does not offer much to support the question of interest to this essay: How do property rights change over time in

the modern state? This requires a process view of property rights, as well as an understanding of how governments are involved in the dynamic aspects of property rights.

For this reason, I choose to examine three frameworks in this essay. Cass

Sunstein offers a view that looks to government as the originator of property rights, and
he offers some discussion of how these rights are subject to change as part of continual
political renegotiation. Harold Demsetz views the creation of property rights in a static
sense (following standard neoclassical maximization). However, his model does
introduce the idea of internalization of externalities, which must be considered when
addressing tobacco (particularly the second hand smoke issue). A final framework to
consider is that of William Riker. Riker offers a process-oriented view of property rights,
with government fully involved as the originator. While his model does show
improvement in considering the dynamic nature of property rights and the active role of
government in modern states, its shortcomings will necessitate an alternate explanation.

Sunsteinian Framework

The Lockean framework of establishing property rights is contrasted starkly by the vision of Sunstein. In his view, rather than man individually claiming property through his labor, government is the source of all property rights. As Sunstein states (p. 209), "private property is certainly a creation of the state". This is somewhat reminiscent of Knapp's *State Theory of Money*, which held the state was necessary for money to come into existence (Mises, 1981, p.88). As Mises' regression theorem proved the impossibility of Knapp's approach, one has to question the logic of the state's initiation

of property rights. If there were no private property rights to protect, why would there need to be a state in the first place? Rather than suggest the state is the creator of all property rights, it seems more correct to suggest the state is the guarantor of all property rights in modern society. There is no question that property rights and government are intertwined (and the relationship has strengthened through history); there is a question as to the logical ordering of that relationship. If, as the Declaration of Independence states, individuals are endowed by their creator with certain unalienable rights and that governments are instituted to secure those rights, clearly the source of rights is not the government, but something antecedent.

In Free Markets and Social Justice, Sunstein seems to ignore this, by focusing on property rights in a modern system. For instance, how does one establish property rights in the former Soviet bloc countries? Clearly Locke's historical approach won't work, as even Locke acknowledged. Locke gave cursory discussion as to how the final property rights (to land) will be assigned (p. 138),

"where the increase of people and stock, with the use of money, had made land scarce and so of some value, the several communities settled the bounds of their distinct territories, and, by laws, within themselves, regulated the properties of the private men of their society, and so, by compact and agreement, settled the property which labour and industry began."

It seems precisely this process outlined by Locke that Sunstein focuses on. How might the laws be established that "regulated the properties of private men"? When more than one man would like to claim the same portion of the commons for himself by his labor, how does society arbitrate the claim? In Locke's historical development, there is

no real problem, as when one man claims one section of land, there is still more readily available. But this is not true as the earth becomes progressively more "subdued."

Unfortunately, Sunstein does not limit his quest to this narrow focus on property rights to land not previously claimed (or illegitimately claimed as in the case of communist countries). Sunstein basically suggests that *every* aspect of property rights is "up for grabs" and must be authorized by the government. He argues for a broad definition of what should be considered property; redistribution claims must be considered as property rights in the same fashion as physical possessions. Sunstein states (p. 210), "public education, literacy programs, welfare assistance, employment programs, and the like are a necessary part of any system of property rights. Such rights are best defended in self-consciously instrumental terms, because of the good things they do." Once these type claims are admitted, *of course* government is the creator of property rights—because these type claims can only be made via the coercive power of the state.

Once this ground is broken, Sunstein spends considerable time examining how one might provide stability to property rights through constitutional means (p. 204), as "a well-drafted constitution can guard against a system in which ownership rights are effectively subject to continuous political revision." This is necessary with Sunstein's broad views of property, whereby one persons claim on a property necessarily imposes a simultaneous claim on another's property. As Sunstein notes (p. 208), this leads to a tension between a system of property and democracy itself—"if property rights are secure, there is a firm limit on what the democratic process is entitled to do." A delicate balance is required, because if those claiming rights to other's physical property through

the democratic process become too great, the system itself may fail: "One of the best ways to destroy a democratic system is to ensure that distribution of wealth and resources is unstable and constantly vulnerable to reevaluation by the political process (Sunstein, p. 210)." Without stability in property rights, individual economic agents will be unable to plan effectively for the long term. In addition, rent seeking losses will become increasingly great as rights are up for renegotiation. As Sunstein correctly notes (p. 210), "government control of property—through constant readjustment of property rights—simply reintroduces the collective action problem originally solved by property rights."

Much of Sunstein's insights are not objectionable, as whatever the original source of property rights may have been, it is undeniable that government action has established property rights that are in reality claims against the property of another. In this reality, the political structure which results is critical to determine whether the system can continue to function or simply revert to barbarism, as one group continually seeks to take from another. But what is interesting is Sunstein's implicit assertion that a more narrow view of property rights is impossible, that free markets necessarily depend upon government establishment of rights to function. While he notes the perils (as discussed above) of government assignment of rights, he nonetheless states that the government's ability to establish rights which are essentially claims on other's property is essential for market capitalism. Sunstein notes (p. 4) that "free markets depend on a range of coercive legal interventions, including the law of property, which can be a serious intrusion on the freedom of people who lack ownership rights." In fact, the creation of a civil society is

seen as accomplished by the state, "The (social and legal) creation of a private sphere, undertaken by the state, is a key element of the process of creating a civil society and market ordering (Sunstein, p. 209)." Sunstein, unfortunately, offers no evidence or citations to back these assertions.

Demsetzian Framework

One cannot examine the issue of tobacco and smoking without addressing how government action is often suggested to address "externalities". Thus we are forced to consider an economic analysis of property rights, where externalities are fully part of the issue. Harold Demsetz offers just such a view of property rights, fully grounded in neoclassical thinking, whereby property rights equate marginal benefits of establishing such rights against the costs. In his view, property rights are an institution which help individuals plan and form expectations about their dealings with others (Demsetz, p. 347). Property rights are able to perform this function by indicating how persons may be harmed or benefited by the use of property. This understanding by Demsetz leads to the recognition that property rights must be assessed in the context of externalities.

As Demsetz notes, externalities are notoriously ambiguous (in some sense, all actions cause externalities). He considers "external costs, external benefits, and pecuniary as well as nonpecuniary externalities," in his analysis (Demsetz, p. 348). But to understand which of these external costs or benefits should be considered, Demsetz introduces the concept of internalization (p. 348), which "refers to a process, usually a change in property rights, that enables these effects to bear (in greater degree) on all interacting persons." With this concept, property rights can be properly understood.

According to Demsetz (p. 348), "A primary function of property rights is that of guiding incentives to achieve a greater internalization of externalities." This helps to limit what type costs and benefits may appropriately be considered an externality. If a cost of internalization (exchange of property rights) is greater than the benefits, then an externality exists.

This understanding leads to an economic view of the emergence of property rights. Sounding very much a Hayekian, Demsetz suggests that property rights emerge when knowledge is discovered (p. 350)—"knowledge of new techniques, new ways of doing the same things, and doing new things." This change in knowledge and subsequent action inevitably leads to harms and benefits that have not been fully internalized in the prior distribution of property rights. When the benefits of internalization exceed the costs, then a new property rights' distribution will be established.

This consideration of costs and benefits also helps to understand why some property is held communally, and some privately. While communal property does have benefits, it has a very important disadvantage: it does not provide the incentives to ensure the costs of one person's use of the commons will be fully borne by that person. This leads to the classic tragedy of the commons, where communal property tends to be overused, since the costs on others and future generations is not taken into consideration. Private property rights tend to come into existence to overcome the costs of internalization by the large numbers of the community. With many members, to secure agreement on a given use policy incurs obviously much greater costs than when an individual is the sole owner. In addition, reaching agreement does not solve the incentive

problem as members of the community will always find it in their individual interest to cheat on the agreement. To avoid this, expensive methods of enforcement must be established as well.

As Demsetz notes, much internalization can be accomplished by changing from communal to private property rights, but it does not eliminate the need for further internalization. Some usage of private property will lead to costs (benefits) imposed (conferred) on others, but to a much smaller degree than with communal property (Demsetz, p. 356). This is especially true because remaining externalities will have far fewer people involved, greatly reducing the costs of negotiation and internalization.

Rikerian Framework

Riker offers an alternative view of property, one based on an emergent, processoriented development. While he shares much of the Demsetzian framework, Riker posits
the necessity of government action to formalize property rights. For Riker, we must
understand why government is willing to allow any property rights, when the
government's monopoly of force could allow it claim all property rights.³⁹ While private
action is necessary a la Demsetz, without the government to authorize and enforce
property rights, they are meaningless. Riker first makes two assumptions, 1) Political
actors maximize utility and 2) Public officials have more resources (military, legitimacy)
than other actors. Riker then suggests four conditions necessary for the emergence of
property rights (p. 955):

³⁹ This seems to be the weak link to his theory. Riker does not address the origin of the monopoly of force and this obviously affects the question. If the government receives power by the consent of the governed, it

- 1. Scarcity. The content of the right is scarce, driving its value above enforcement costs. Without such value, control is pointless.
- 2. Right-holders desire the right. If this condition is not satisfied, holders do not seek the right; hence, it does not emerge.
- 3. Rule makers desire to recognize the right. A right unproclaimed by the enforcers is not ultimately enforceable.
- 4. Duty-bearers respect the right. This is a necessary, but often unnoticed, condition. Riker argues that Demsetz ignored conditions 3 and 4, while Locke ignored conditions 1 and 3 (p. 967).⁴⁰ Thus for Riker, similar to Sunstein, government is the originator of property rights, in response to scarcity.

In Riker's model, rights originate in a historical event—there are identifiable actors with identifiable motives who create rights (p. 955). Since the granter of the right in effect commits itself to enforcement of the right forever, it will only do so "if the gain from tax income and gratitude exceeds the cost of enforcement (p. 955)." In a similar fashion, persons desiring the right will only desire the right if the benefit from the government enforced right exceeds the cost in taxes and gratitude.

What Is The Process Of Change?

Original rights may very well be assigned according to a Lockean framework.

But they are not likely to stay that way, if an interest group desiring the right can obtain sufficient political power. Conflict over rights is likely to occur, especially in the presence of growing scarcity. This conflict will not result instantly in a change in rights,

seems hardly likely the government could subsequently take all property rights to itself without some restriction of its powers by the governed.

but is more likely to begin a process which may or may not lead to actual change. As conflict occurs, participants in the conflict will attempt to sway public opinion. Political entrepreneurs may see the conflict as an opportunity to gain power. As public opinion changes, there may be more opportunities for further property rights changes. These changes could be in the form of change in ownership, or in the form of change in control of resources, i.e., regulation.

Riker is correct to stress the process nature of property rights—especially as one considers the change of property rights over time as is the case with tobacco profits.

However, Riker's four conditions do not accurately describe the process analysis that we see. Our process analysis also includes four necessary conditions for property rights changes.

- 1. Scarcity—the item must not be a free good.
- 2. Conflict. The scarcity leads to a process of conflict, as some non-rights holders seek to claim the good.
- 3. Changes in public opinion. For a change in property rights to occur, the preexisting claim must be rejected by the general public. This change can be led either by public or private actors.
- 4. Political entrepreneurs seek to reassign the property right.

These four conditions are necessary, but are not sufficient to ensure an actual change in property rights assignments. While conflict due to scarcity is always present, if public opinion does not change enough, political entrepreneurs will not support the change in

⁴⁰ This seems unfair to Locke. While its true that Locke began with a state of nature where land was equally available to all, the property right began with labor, as land mixed with labor was scarce. So one can hardly say that Locke ignored scarcity, rather he saw the scarcity as applied to products of man's labor.

rights assignments. Public opinion must be mobilized to support the change, in part because there seems to be a conservative, "stare decisis" type of support of the existing status quo of property rights. This also suggests that changes will tend to be gradual, with incremental changes more likely than wholesale revision of existing rights structures.

Tobacco Case Study: Changes In Property Rights

Following Krueger (1990), this chapter will examine the tobacco regulation of the last fifty years from a historical perspective. Both the institutions and the institutional change (including regulation) cannot be understood outside of the historical approach.

The dynamics of institutional change are guided by the historical factors surrounding the issue, and are best understood by examining the incentives of the actors involved.

Krueger correctly criticizes models that view controls (i.e., regulation) as a once-and-for-all phenomenon, as "a control cannot be analyzed as a static, unchanging set of regulations, and must be seen in light of the economic-political forces that it sets in motion (p. 173)." In Krueger's analysis of the sugar market (p. 211), she concludes that a "policy instrument will be seized upon by groups who perceive themselves to benefit (regardless of whether they had anything to do with initiating the programme or not"--our investigation will support this conclusion.

Given the process of change highlighted above, how has conflict over property rights evolved for tobacco? There are several nice reviews of tobacco history, some of which I will use here, which provide a comprehensive view of tobacco. Yet the focus

⁴¹ There could be numerous examples, such as Henry Waxman with tobacco, but a most contemporary

here will be to identify those factors which lead to changing claims on tobacco profits. I will present a review of the history of tobacco during the 20th century in-depth, since the examination of tobacco legislation and litigation in Chapters Two and Three covered the latter part of this period.

Towards the end of the 1800s, hostility towards tobacco intensified. As a result of a technical innovation, it was now possible to mass produce cigarettes quite inexpensively; the result was that cigarettes became widely affordable to the masses, and smoking spread throughout the country. By the end of the century, the American Tobacco Company would have 90% of the market, thanks to their technical innovations and superior marketing (Whelan, p. 42). State limitations on cigarettes swelled in the 1890s, as many opposition groups press the issue; 26 states limited the ability of minors to purchase tobacco (Borio, p. 8). In 1898, the Tennessee Supreme Court upheld a total ban on the sales of cigarettes, ruling that they are "not legitimate articles of commerce, because (they are) wholly noxious and deleterious to health. Their use is always harmful (Borio, p. 8)."

20th Century

By 1901, strong anti-cigarette activity was underway in 43 of the 45 states (Borio, p. 9). Whelan, not a tobacco supporter, describes the nature of the early anti-cigarette forces,

The anti-tobacco forces were frequently strident, hysterical, irrational, emotional---and committed with an almost religious fervor to eliminating cigarettes. (Curiously, they ignored the other forms of tobacco use.)

Their pleas were moralistic and similar to the growing sentiment against alcoholic beverages. Lacking today's clear-cut statistics on cancer, heart disease and emphysema, they conjured up medical "evidence," claiming, for example, that cigarette smoking caused color blindness, weak eyesight, baldness, stunted growth, insanity, sterility, impotence, sexual promiscuity, drunkenness, a tendency to turn to crime, and even immediate death. (p. 44)

While state efforts against tobacco gathered steam, the *U.S. Pharmacopoeia*, an official listing of drugs by the U.S. government, dropped tobacco as the price of gaining southern support for the Food and Drug Act of 1906 (Fritschler, p. 34). This victory for tobacco would prove crucial for the 1980s and 1990s industry battles with the FDA. Thus even in the early 1900s, conditions 1 & 2 are present for a reallocation of property rights: scarcity and conflict over scarcity. But what is needed for actual change is public opinion to shift, and political entrepreneurs to seize the issue.

But just as anti-tobacco efforts appeared to be paying off, World War I broke out, and the tobacco industry became "an essential part of the war effort" as Gen. Pershing said, "You ask me what we need to win this war...I answer tobacco as much as bullets (Whelan, p. 50)." Public opinion was thus not able to be mobilized for a banning of the product.

After the war was over, prohibition appeared to give the movement some steam, as evangelist Billy Sunday cried (Whelan, p. 51), "Prohibition is won; now for tobacco!" Unfortunately for tobacco critics, this would be the peak of anti-cigarette activity for the near term. States began their own tobacco excise taxes in 1921, and one by one states began dropping their smoking restrictions (Whelan, p. 51). While the initial conflict was

over the right to smoke at all, the political entrepreneurs at the state level found it much more profitable to tax tobacco than to ban it. Rights were reallocated (smoker's income and tobacco profits), but not those initially under contention.

The 1920s saw an increase in the scholarly case both for and against tobacco, with science being used to justify positions on tobacco. But the tobacco critics were harmed by two demographic changes. First, the conclusion of World War I brought home hundreds of thousands of young men who picked up the habit while in the service. In addition to this large increase in demand, the tobacco industry was able to take advantage of the increasing liberties of American females, and deliberately marketed to them as well. Helen Hayes and Amelia Earhart endorsed Luckies in 1925 (Borio, p. 13), and Philip Morris' advertisements asked, "Has smoking any more to do with a woman's morals than has the color of her hair?" This marketing appeared to pay off, as smoking initiation rates among young females tripled in the period 1925-1935 (Borio, p. 13).

With the large numbers of Americans now smoking, the anti-tobacco forces were put in retreat; the last state with tobacco restrictions, Kansas, was forced to drop its ban on sales in 1927 (Borio, p. 13). By 1930, the huge tobacco revenues were generating over \$450 million in taxes to the federal government alone--nearly 12% of total revenues-making the government very much dependent on the health of the tobacco industry (Orzechowski and Walker, p. 5). In Richard Kluger's book, *Ashes to Ashes*, he questions why (p. xvii), "given the enormity of the crimes against humanity with which it has been charged, the cigarette has not been outlawed" and then answers his own

question: governments themselves are addicted to the revenue; the cigarette is the most heavily taxed consumer product in the world (p. xviii). Certainly the data from 1930 would support that claim.⁴³

The great depression was an ill wind that blew no one any good, and the tobacco industry was hurt as well, although less than other parts of the economy. The early 1930s started with a price war, as industry leader RJR unwisely hiked their prices to 15 cents/pack, at a time when the nation was in the depths of the depression, when tobacco leaf prices were 25% of their war peak, and RJR was the industry leader in profits (Kluger, p. 82). This led them open to charges of gross profiteering, and more importantly, left them open to competitive forces of smaller tobacco companies, who promptly responded with discount brands. One small firm quickly introduced a 10 cent pack, figuring that the steep discount would serve as its own marketing--Philip Morris and others quickly followed (Kluger, p. 82). By the end of 1932, the discount brands held almost 20% of the market, and the industry leaders quickly lowered prices to close to that of the discount brands, resulting in breakeven or slight losses for the year (Kluger, p. 83).

While the price wars were a near disaster for the industry, tobacco farmers were being decimated. With lower leaf prices and usurious interest rates (approaching 37% in some cases), farmers faced increasing distress—and they made sure their government representatives were aware of it (Kluger, p. 84). Given the bad image the industry

⁴³ And note, this did not include any of the tax revenues to the individual states.

⁴² The total receipts to the government in 1929 were only \$3.9 billion (according to the 1997 Economic Report of the President).

already had with their price hikes, they realized the need to cooperate when the new Roosevelt administration threatened to put cigarette prices under government control and open the industry books for inspection against profiteering (Kluger, p. 85). The tobacco industry had, up to this point, not been allied with the farmers and held a 2-3 year supply of leaf to protect against the farmers' demands and possible bad crops. But the industry realized the political need to support the farmers, and agreed to pay nearly twice the amount as in the previous growing season (Kluger, p. 85). What followed was the Agricultural Adjustment Act of 1933, whereby the federal government would guarantee a minimum price of tobacco leaf, in exchange for acreage limits by the farmers (Borio, p. 14). The industry would pay higher prices, and would provide an annual forecast of expected leaf demands to the Department of Agriculture.

Our theory of property rights changes requires four conditions: scarcity, conflict, opinion changes, and political entrepreneurship. In the circumstances reviewed above, all four were satisfied. The depression saw scarcity lead to conflict; farmers were being decimated. The industry had foolishly attempted a massive price increase, engendering hostility from the public at large (public opinion change). The Roosevelt administration saw an opportunity to reallocate a right, and did so.

But of course, changes are never once and for all, and the process continued. The industry slowly recovered, and the advent of another World War led to tobacco being named a protected crop, with large amounts of cigarettes shipped overseas to servicemen. By the end of the 30s, per capita consumption of cigarettes was almost twice that of the beginning of the decade (Borio, p. 15). While most of the media were reluctant to

confront the tobacco industry, due to the large amount of advertising dollars spent by tobacco, Reader's Digest (who did not accept tobacco dollars) aggressively attacked the industry. In 1942 Reader's Digest started publishing articles that were hostile to smoking, and that led to political efforts against the industry. Kluger notes (p. 130) that the Reader's Digest article of 1942 was shortly followed by FTC action against the industry. The FTC asserted that cigarette advertisements came close to implying that cigarettes were harmless, a claim not demonstrated. The industry would battle this effort for the next decade in the courts. In the meantime, the tobacco wars would rage in the advertising world. This episode illustrates the requirement to change public opinion for a rights change to be attempted. While Riker's model recognizes the role of government, he incorrectly leaves out the requirement for conflict leading to public opinion changes. These changes are necessary to provide the political entrepreneur the political power to reassign the right.

As introduced in Chapter Two, the tobacco companies used health advertising as a large part of their competitive activity, in an effort to distinguish what many people believed to be similar products. Health advertising, while intended to capture market share for one brand over another, had the effect of decreasing overall cigarette consumption. The result of unfettered competition in cigarette advertising was a classical prisoner's dilemma for the large companies, with representative payoffs in Figure 4.1 below:

⁴⁴ Consumer Reports found little to distinguish brands in blindfold tests (Borio, p. 14).

В		Compe	etitor A
		S	DS
ompetitor	S	-1, -1	1, -2
Com	DS	-2, 1	0, 0

Figure 4.1 Prisoner's Dilemma-Large Firm

No matter what a competitor did, it was in each company's interest to scare (S) customers about the competitor's product. This leads to a negative payoff for both companies, which could be bettered by both abandoning scare advertising (don't scare-DS).

However, competitive pressures force this outcome, unless an outside enforcement mechanism could be used. Enter the Federal Trade Commission. Cartels are notorious for being ineffective; there is too big a payoff from cheating. The only effective cartels are usually ones that can use the government as an enforcement mechanism. There is little doubt the health claims made by the tobacco companies were grossly exaggerated; certainly there was no proof or evidence offered that Chesterfields had "not a cough in a carload." What is debatable is the proper way to educate consumers as to fraudulent claims. Even most anti-smoking advocates, such as Whelan (p. 91) and Kluger (p. 185), argue that this decision helped the industry far more than it hurt it.

Kluger states, "Like most forms of censorship, the FTC edict succeeded mainly in promoting ignorance—in this case, on the part of consumers—and retrogression—on the manufacturer's part. Having somewhat modified their product in order to appear to have reduced its health hazards (that they nevertheless continued to deny existed), the companies now saw no value in continuing the trend. If they could not even imply a reduction in the perils of smoking, under the new FTC rules, further slashes in tar and nicotine strength offered them no possibility of competitive advantage and might even, if they weakened their brands too

much, destroy the addictive power of cigarettes that sustained their economic existence. Soon the yields leveled off or, in some cases, began creeping upward again (p. 190).

The FTC edict banning all health claims eliminated any potential competition based on health issues, even advertisements that would provide beneficial information to customers. And as noted in Chapter Two, this led to an increase in the tar and nicotine content of cigarettes. When they could not compete on health, they competed on taste, which was enhanced with less effective filtration. But if the payoffs were as big as noted in the prisoner's dilemma above, why wouldn't we expect to see cooperation (as tobacco did when the companies jointly funded legal defenses)?

The answer lies in the competitive nature of the industry, which more accurately characterized the industry than the two large firm illustration above. Absent government restrictions on entry, small competitors could easily break through a cartel's agreement, even if the existing members could enforce discipline (doubtful). The payoffs for the small company/big company are very different from those above:

		Large Firm		
=		S	DS	
Firm	S	-2, -3	2, -1	
Small	DS	-3, -2	1, 2	

Figure 4.2
Prisoner's Dilemma-Small/Large Firm

As noted in the representative payoffs above in Figure 4.2, if a large firm engages in scare advertising, it will be hit disproportionately since overall consumption will go down, and it has a larger share of the existing market. The small firm, however, has an incentive to scare, independent of what the large firm does, since even though overall cigarette smoking will go down, it will gain a much larger share of the remaining market. As Calfee notes, this is exactly what we saw in the 1950s: RJR and American Tobacco, the two largest firms, never engaged in so-called fear advertising; but the next four smaller firms did (p. 42).

This effort at fear advertising was helped by three well-constructed epidemiological studies on smoking published in 1950 (Borio, p. 16). Up until this point, there was a general feeling that cigarettes were unhealthy, but no "proof" that could jar a person out of his habit. Popular opinion used such terms as "coffin nails," "smoker's cough," "gasper," "wheezer," and "lung duster" (Calfee, p. 39) in describing smoking and cigarettes. These terms were given added credibility by the health studies that would follow (Goodin, p. 8). When you add these two (fear advertising and scientific studies) to the existing folk wisdom concerning cigarettes, you initiate powerful momentum to change public opinion regarding cigarettes. And cigarette consumption did fall dramatically in 1953 and 1954 at the height of the fear advertising. And while cigarette consumption returned after the FTC edict banned health claims, the landscape was irrevocably changed: at the beginning of the 1950s, filter brands accounted for perhaps two percent of the market, by the end of the decade, half of all cigarettes had filter tips (Borio, p. 16).

Not only was private research becoming increasingly hostile to the tobacco industry towards the end of the '50s, but the U.S. government was getting into the debate. As our model of change suggests, when public opinion changes, political entrepreneurship may be able to reallocate rights. In 1956, at the request of the Surgeon General, a study group began reviewing the overall scientific evidence (Whelan, p. 86). Their conclusion: smoking is correlated with cancer. As Whelan notes, this relationship alone was sufficient (in the opinion of the study group) to initiate public health measures (p. 86). The tobacco industry did not sit back and ignore these attacks on their product. While they had previously formed the Tobacco Industry Research Committee (TIRC) to provide answers to the growing health controversy, in 1958, the Tobacco Institute (TI) was formed. TI was publicly committed to defending the interests of farmers, factory workers and retailers, and became one of the most effective industry lobbies in Washington D.C. (Kluger, p. 211). As Senator Kennedy described the TI, "dollar for dollar they're probably the most effective lobby on Capital Hill (Kluger, p. 466)." The TI stressed the importance of the industry to the national economy and the American farmer, the inconclusiveness of existing scientific studies and smokers rights. Critics were not so charitable; they accused the industry's actions as designed "to dispute, distort, minimize, or ignore the unfolding evidence against it (Kluger, p. 205)." Clearly the requisite condition of conflict over scarcity (condition #2) was present.

What was the position of the American Medical Association (AMA) and its journals during the late 50s and early 60s? The Journal of the American Medical Association (JAMA) editorialized that there were not enough facts to "warrant the

assumption of an all-or-none authoritative position" on causation (Kluger, p. 203).

Critics of tobacco suggest that the AMA was simply being political in its decision not to speak out against the tobacco industry. The AMA was primarily concerned with the passage of Medicare, which they adamantly opposed. Kluger reports that

Morton Levin, the top New York state health officer...recalled attending an executive session of AMA eminences at the organization's 1960 convention and hearing a powerful trustee insist that the AMA remain mute on the smoking issue because "the Senators from the tobacco states have threatened to vote against us on Medicare if we take any formal stand whatever—and, gentlemen, we simply cannot have Medicare." (p. 203).

If this report is true, the AMA would have reason not to antagonize the tobacco state lawmakers. Given the congressional seniority system and the domination of Democrats in the South, many of the congressional committee leaders were from tobacco states, and fully capable of either helping or hurting an interest group (Kluger, pp. 264-65).

Nevertheless, Medicare (healthcare for senior citizens) was ultimately passed, and also Medicaid (healthcare for the poor), as Johnson's vision of a "great society" bore fruit in the health arena. This seemingly innocuous change would later have great implications for the tobacco industry. Since government was now responsible for the health care of the aged, the government bore most of the health costs of smoking (which primarily affected the elderly). The costs of treating smoking-related illnesses would be the stated reason for Mississippi Attorney General Moore's lawsuit against tobacco. As Moore stated (p. 192), "Governments—including the State of Mississippi—have been forced to assume the heavy financial responsibility of caring for smoking victims who could not afford to pay for their own health problems." With tobacco, conflict over

scarcity was in many arenas; scarcity for clean air, scarcity of tax revenues, as well as scarcity over the type society we live in (i.e., would we allow smoking at all).

As mentioned in Chapter Two, political entrepreneurs should be expected to mirror changes in public opinion if they expect to be successful; the most successful will be able to anticipate changing political dynamics. With the changing environment regarding tobacco, one would expect a politician to take the lead and satisfy our fourth condition. Senator Maurine Neuberger of Oregon stepped forward in precisely that role. She introduced legislation requiring the President to name a group to design a comprehensive national program to combat tobacco (Kluger, p 222). Sen. Neuberger was ultimately unsuccessful, but she continued to push for government mandated warning labels on cigarettes. Our four conditions are necessary, but not sufficient for change to occur. In this case, the process began, but did not progress enough for change to occur.

Nonetheless, smoking was now fully on the public's radar screen, and the early '60s saw continued concern over the health effects of smoking. While tobacco was waging and winning liability battles fought by smokers afflicted with cancer, in the court of public opinion there was clearly concern over the effects. One small event would prove to be a major turning point:

During the Presidential press conference of May 23, 1961 (actually 1962, see Kluger, p. 223), a reporter ... asked President Kennedy what he thought the federal government should do about the growing concern about cigarettes. Mr. Kennedy replied, "That matter is sensitive enough and the stock market is in sufficient difficulty without my giving you an answer which is not based on complete information...I would be glad to respond to that question in more detail next week."....Kennedy referred the matter to Surgeon General Luther Terry for a response. Two weeks later, Dr. Terry (a cigarette smoker) announced, "It is timely to undertake

a comprehensive review of all available data. I have therefore decided to appoint an expert advisory committee to study the evidence, evaluate it, and...make recommendations." (Whelan, p. 99).

As evidence of the potential ramifications of the Surgeon General's report, the FTC, responding to a request by Senator Neuberger to mandate warning labels on cigarettes, responded that,

"If the Commission is able to secure competent probative scientific evidence including that furnished by the Public Health Service" of the harmful effects of smoking, Dixon (FTC Chairman) wrote, then an FTC order to include health warnings in cigarette ads would likely "be upheld in appellate courts." (Kluger, p. 223).

As government growth continued, the Congress was increasingly delegating to government bureaucrats the power to regulate (Kluger, p. 266). Public opinion was important in giving a "mandate" for new regulation, but political cover was also needed: the 1964 Surgeon General's report on smoking would provide just that.

The committee report was devastating to the tobacco industry; there was virtually no redeeming feature for the industry to highlight. One summary said, "Cigarette smoking is causally related to lung cancer in men; the magnitude of the effect of cigarette smoking far outweighs all other factors (Fritschler, p. 48)." There—the federal government finally said it officially—cigarettes *cause* cancer. Other conclusions were also damning, as the report noted a positive relationship between cigarette smoking and a host of other diseases (Fritschler, p. 48). The front page report of the New York *Herald Tribune* was quick to trumpet the result, with the headline reading "It's Official — Cigarette Smoking Can Kill You" (Kluger, p. 260). As Fritschler reports (p. 49), the

advisory committee itself said the time for waiting for government action was over, "it was more prudent from the public health viewpoint to accept the cause-and-effect relationship that the data indicated than to wait until the exact relationship had been determined."

There were, of course, limitations in the study. The study had not considered the effects of filters on cigarettes, since most of the studies reviewed had data from patients who smoked filterless cigarettes (Kluger, p. 261). And the usual industry complaint was still valid; the only evidence was statistical, there was no way to prove causation, as multicollinearity could be a problem. But the court of public opinion does not require proof, and the tobacco industry was found guilty, at least by some people. This conclusion was initially seen in cigarette consumption itself; after the release of the Surgeon General's report, sales of cigarettes plummeted 20 percent in the first two months--but sales gradually returned to their previous levels (Whelan, p. 102).

The Surgeon General's report was conclusive for government action, tobacco was deadly. The question now was what to do about it, if anything. All four conditions for change of property rights were now present, seemingly enough to effect a change. The report gave the government's imprimatur for official action against cigarettes, and first on the horizon was warning labels. While warning labels were opposed by the industry, the gathering steam against them forced a reconsideration, and warning labels properly designed might even be useful. The tobacco industry was 100 percent successful in its lawsuits involving liability. And to the industry's benefit, the American Law Institute's 1965 revision to the *Restatement of the Law of Torts* stated the following:

The articles sold must be dangerous to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics. Good whiskey is not unreasonably dangerous merely because it will make some people drunk, and is especially dangerous to alcoholics; but bad whiskey, containing a dangerous amount of fusel oil, is unreasonably dangerous. Good tobacco is not unreasonably dangerous merely because the effects of smoking may be harmful; but tobacco containing something like marijuana may be unreasonably dangerous (Viscuzi, 1992, p. 61).

But these victories notwithstanding, increasing numbers of product liability suits were being filed as more and more lifelong smokers became sick with possible smoking-related diseases. Government warning labels would serve as a possible additional defense to product liability suits: if consumers were warned regarding the effects of smoking, how could they blame the manufacturer? The warning finally enacted simply stated: Caution—Cigarette Smoking May Be Hazardous To Your Health. Anti-tobacco groups were furious with the result. Sen. Frank Moss of Utah opined, in exchange for a few cautionary words on the side of a pack, "Congress exempted the cigarette industry from the normal regulatory process (Kluger, p. 291)." While undoubtedly the industry was pleased with the labeling on the legal front (Kluger, pp. 290-291), the warning was a further broadside in the continuing war for public support of its product.

Public opinion was increasingly against the tobacco product, even as per capita cigarette consumption was in the process of peaking (Viscuzi, p. 54). Gallup poll results reported by Viscuzi from the period 1949-1981 bear this out. On the critical question of cigarettes and lung cancer, only 41 percent of the population thought that cigarettes were a causal factor in 1954. But by the late 50s, the number had risen to 45-50 percent, by

1969 it was up to 70 percent, and by 1981 it was up to 83 percent. The Surgeon General's report in 1967 suggested smoking was linked to heart disease, and in 1969 connected maternal smoking with low birth weights (Borio, p. 21). Another trend which impacted tobacco negatively was the rise of consumer legislation in the late 60s. Ralph Nadar had risen to the scene and consumer advocacy was becoming increasingly good politics (Kluger, p. 331).

Nadar pushed the FAA to ban smoking on airplanes in 1969 (unsuccessfully), and the health lobby began to aggressively push for banning cigarette advertising. The idea was that only the aggressive marketing of the industry was responsible for the continued success of its product, and that if the advertising could be stopped, so would smoking. In the first shot of this skirmish, anti-tobacco activists sued the FCC over lack of enforcement of the "Fairness Doctrine." The Fairness Doctrine required "broadcasters to allow free time to state opposing views on matters of public controversy dealt with on the air (Kluger, p. 304)." The novelty in this case was applying for its use against commercials. In effect, the tobacco industry would be forced to pay not only for its own commercials, but also those of its enemies. The broadcast industry itself had been naturally reticent to discuss the tobacco issue, as it received 70 percent of the tobacco industry's advertising dollars (Kluger, p. 302). Ultimately, the FCC ruled in favor of the anti-tobacco activists, and broadcasters had to allow rebuttal time to cigarette advertising, but on a less than minute for minute basis (Kluger, p. 310).

⁴⁵ To the extent that providing gratis air time to anti-tobacco ads reduced overall revenues, broadcasters would be forced to raise advertising prices on paying customers.

A few observations are in order here. First, the changes mandated by the FCC would likely never have happened thirty years prior. Changes in property rights are a process—if the groundwork had not already been laid (in terms of changing public opinion), political entrepreneurs would be hesitant to address. While bureaucrats were reticent to regulate in the '40s and '50s, proceeding carefully, the FCC made its decision relatively quickly. In addition, the changes in property rights can be via regulation, since regulation limits an actor's use of property. And finally, as in the analysis by Krueger (1990), government action in an area gives rise to other interested parties and interest groups, whether they were originally part of an issue or not. While neither Nadar nor Banzhaf (who sued the FCC) were part of a group previously contesting tobacco, they both nonetheless saw it in their interest to contest the tobacco industry.

The restrictions were just a prelude, as a total ban of cigarette advertising was favored by many of the anti-tobacco activists. In discussion with the Senate Commerce Committee in 1969, the broadcasting industry, without consulting the tobacco industry, offered to phase out tobacco advertisements over four years (Kluger, p. 332). With the dynamics of the Senate not in their favor, the industry agreed to voluntarily eliminate all television advertising in exchange for a slight toning down of proposed warning labels. The industry was able to make lemonade out of lemons, as television advertising took 80 percent of its advertising budget (Kluger, p. 327). Thus by voluntarily agreeing to what likely would have eventually occurred anyway, they were able to save millions of dollars, and more importantly, virtually eliminate any potential new competitors to the industry. Congress itself was concerned over how this money might be used. In 1969, Sen. Moss

directly asked the C.E.O. of Philip Morris, Joseph Cullman, what he would do with the advertising dollars formerly spent on television. Cullman responded, "I think that is too important a matter for me to answer directly, other than to say that it is a large amount of money and that we will approach it constructively (Whelan, p. 131). This congressional interest in how tobacco profits would be used is instructive—and consistent with our thesis that much of the action against tobacco industry in the last half of the 20th century was in pursuit of a change in how tobacco profits would be allocated.

public policy in the '80s and '90s: the Surgeon General's annual report on smoking addressed second-hand smoke (Borio, p. 22). While the risks of tobacco use to smokers were by this time well recognized by the vast majority of people, most nonsmokers simply felt that cigarette smoking was annoying. If they did think it was more than annoying, there was no evidence to back up their thoughts. This lack of evidence did not delay the new Surgeon General, Jesse Steinfeld, who thought of Environmental Tobacco Smoke (ETS, usually referred to as second hand smoke) as simply another form of environmental pollution. While without hard scientific support, Steinfeld nonetheless *knew* that ETS was deadly, "Biologically it had to be, and laboratory experiments showed that no animal smoked voluntarily—there was systemic resistance and histologically observable changes in the cells of exposed animals (Kluger, p. 366)." These observations and intuition led Steinfeld to call for banning smoking in such enclosed places as restaurants, theaters, and mass transit systems.

Steinfeld's stand against tobacco illustrates another aspect of the process of changing property rights. While a change in public opinion is necessary, it may be accomplished by either private or public actors. As in the rent extraction model, once a political figure is recognized as an independent agent, he is no longer a passive supplier of property rights after a change in opinion has occurred. Instead, he may actively pursue changes based on his own agenda. With the power of his position, he may attempt to influence public opinion directly, to lead the change. The possible ill effects of ETS on nonsmokers opened the door for political entrepreneurs. As the percentage of U.S. smokers dropped, every year found an increasing percentage of people that found smoke annoying. In addition, the number of farms directly involved in tobacco production as well as the processors of tobacco had plummeted since the early '50s (see Figure 4.3 below). This reduced the supporters of tobacco, and opened the door for opposition.

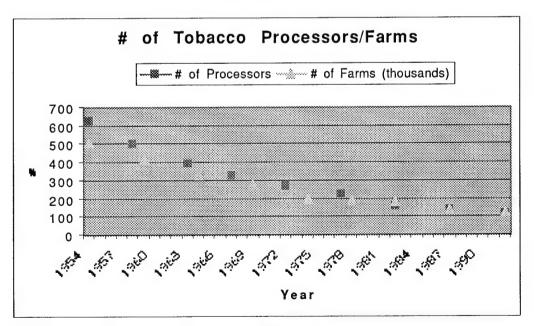


Figure 4.3

While Ralph Nadar had been unsuccessful in his attempt to ban smoking on airplanes in 1969 with the FAA, in 1972 he turned to the Civil Aeronautics Board (CAB), and found a much more hospitable environment (Kluger, p. 373). As Kluger notes (p. 373), "while the health evidence ... was scanty, 60 percent of all passengers indicated they were bothered by smoke on flights." The CAB responded to the desires of the majority in 1973 and mandated separate seating sections for smokers and nonsmokers, one of the initial steps in ostracizing smokers (Borio, p. 23). As the airlines noted, the air inside airplanes' cabins was ventilated completely *every five minutes* and thus cleaner than what the EPA required in public buildings. The CAB responded that due to the high density seating this was immaterial and held the order in effect (Kluger, p. 373). After this victory, Nadar turned his sights towards buses traveling interstate routes—within two years smokers were sent "to the back of the bus" (Kluger, p. 374). Minnesota followed this in 1975 with the passage of the first Clean Indoor Air Act, segregating smokers and nonsmokers (Borio, p. 23).

The '80s would see renewed emphasis on the ETS issue, especially with the new Surgeon General, C. Everett Koop, whose crusade against tobacco was a hallmark of his time in office. Throughout the '80s, the scientific case against ETS was shaky at best, with numerous conflicting studies (Kluger, p. 499). And even if one were to believe the studies that suggested a relationship to ETS and cancer (and ignore conflicting studies), the increased risk was far smaller than the risk of smoking itself. As Kluger notes (pp. 501-502),

"put another way, about 6 nonsmoking wives of nonsmoking husbands succumbed annually to lung cancer among every 100,000 in that category; if their husbands smoked, their death ratio from the disease rose to 8 per 100,000, or an increased risk of 1 in 50,000. The public health community...was not above using ...'Creative Statistics', found to be distorting relative risk data rather than (using) absolute figures....to evoke fear."

And of course, most of the studies selected nonsmoking spouses, while the majority of the public policy aspects related to those exposed to occasional ETS, such as at public restaurants. For nonsmokers in general, the consensus of the studies suggested they absorbed "the toxic equivalent of about one-fifth of a cigarette per day...translated into about 1 percent of the excess risk of lung cancer that active smokers faced and about 2 percent of their risk of heart disease (Kluger, p. 501)."

When questioned about his apparent overstating of the risks to nonsmokers of ETS, Koop replied that as the nation's ranking public-health advocate, he had to be forceful in warning of the ETS threat in order to win the public's attention (Kluger, p. 503). The steady drum against smoking, with fewer Americans smoking every year (percentage wise), and the new ETS charges had their effects: smoking was increasingly seen as a public health threat, and not just a personal health decision. Indeed, for the public-health community, the ETS issue was like manna sent from Heaven:

...linking ETS with direct smoking in order to alarm and mobilize the public against the still widely practiced habit....As epidemiologist Lester Breslow, former dean of the UCLA School of Public Health, remarked, it is hard to awaken the people to a public-health peril, but once the arousal has begun, "it builds to a mighty wave, gathering force from almost any supporting evidence" (Kluger, p. 504).

Breslow's mighty wave was indeed building, destined to lead to a restructuring of claims to tobacco profits. Kluger notes the potential of ETS in the mid-80s:

Besides stigmatizing smokers, the ETS issue brought with it a fresh rationale for interventionist measures. If smokers were now viewed as violators of the social contract by imposing the unhealthful consequences of their pleasure taking on others, then it might be quite acceptable to quarantine or even punish them as part of the broader social movement to cleanse the environment. Smoking near someone else was no more excusable than poisoning streams with industrial runoff or fouling the air with toxic smokestack emissions (Kluger, p. 506).

Not only was the government acting against the smokers, but they were also the target of jokes. Comedian Steve Martin included the issue in his routine (Kluger, p. 553) by remarking that when friends asked him, "Do you mind if I smoke?" he now replied, "not in the least—do you mind if I fart?" Clearly smokers were socially in retreat. This was reflected in two polls in 1987, where one poll found 87 percent of nonsmokers and half of smokers believed that nonsmokers had a right to a smoke-free environment, and the other poll found 75 percent believed that ETS was harmful to nonsmokers (Kluger, p. 678).

The 1989 Surgeon General's report on smoking acknowledged the social engineering aspects of public restrictions, which "may have the side effect of discouraging tobacco use by reducing opportunities to smoke and changing public attitudes about the social acceptability of smoking (Kluger, p. 680)." This was angrily noted by some smokers, as one smoking reporter described the banning of smoking at his workplace, "this is a process of humiliation (Kluger, p. 680)." Sunstein refers to this social engineering process as changing social norms, which the government cannot help but do, and in fact, a good bit of government action is designed to do (p. 37). Clearly

social norms regarding smoking changed in this period, and government activity was instrumental in leading this change.

Although where one sits on the ideological spectrum may color your opinion on the government's attempts to change social norms, virtually everyone agrees it resorted to suspect methods in the ETS knockout punch to tobacco. In 1993, the EPA issued a report linking ETS to cancer, labeling ETS a class A carcinogen. The report, a "meta" study linking eleven other ETS studies, came to its conclusion despite the fact that only one of the original studies had statistical significance, and then only at the 90 percent confidence level (Viscuzi, p. 2). In some cases, the studies reviewed came up with answers in the opposite direction. The major problem with this report was the lack of multivariate controls normally done with such studies. Another concern was a lowering of the confidence level from 95 percent (EPA's published guideline for analysis) to 90%, an easier standard to meet, which suggested the EPA was looking for an answer. As Kluger (an anti-tobacco writer) notes (p. 739), "the government agencies seemed nearly as capable in this instance of blowing smoke at the public to cloud the scarcity of cold, clinical science in support of the indictment of ETS as a substantial public-health risk as the cigarette companies had habitually been in denying and distorting the overwhelming scientific case against direct use of their product."

The EPA's report was the final bullet needed for major changes in tobacco policy.

As anti-tobacco advocates acknowledge, the report went a long way towards eliminating smoking in all public establishments. As Fran Du Melle, the deputy managing director of the American Lung Association said, "It became the Bible of health effects...it gave

policy-makers the ammunition they needed to go forward with state and local ordinances (Davis, p. 2)." James Repace, an EPA official who had worked off duty in the antitobacco movement for 20 years, agreed with this assessment, "It had a big impact on public sensibility... When this came out, it was electrifying (Davis, p. 1)." Public restrictions on smoking came out in rapid fire manner after this. In 1993, the White House, U.S. Postal Service and U.S. House of Representatives banned smoking in their respective areas and California banned smoking in all state buildings, hospitals and prisons; in 1994 Congress banned smoking in most schools and Amtrak banned smoking on short and medium distance trips; in 1997 President Clinton banned smoking in all federal workplaces; and in 1998, California banned smoking in bars, taverns and gaming clubs (Davis, p. 4).

Smokers and the industry found little solace in a 1998 ruling by a federal judge that the EPA report was faulty. Said Judge Osteen, 46

EPA disregarded information and made findings on selective information; did not disseminate significant epidemiologic information; deviated from its 'Risk Assessment Guidelines;' failed to disclose important findings and reasonings; and left significant questions without answers...EPA's conduct left substantial holes in the administrative record (Davis, p. 1)."

While the ruling may help slow the growth of additional restrictions on smoking, it is doubtful that the ruling will have an effect on existing regulation. As one smoker said (Davis, p. 1), "I don't think they'll ever let us back in."

⁴⁶ It should be noted that Judge Osteen was a former tobacco lawyer, although he had also recently ruled against the industry (Davis, p. 1) on the question of FDA regulation.

Given the low actual risk to nonsmokers of ETS (even if one accepts the flawed EPA methodology), one wonders why the hostility towards ETS. One might hypothesize that people are not genuinely threatened by ETS, but that for nonsmokers ETS is simply a convenient excuse to eliminate annoying smoke. While this may be true for some, another alternative is simply that people overestimate low probability, widely publicized risks – such as the nuclear power industry, for example. In Viscuzi's review of the literature on this subject, he notes numerous studies indicate that people not only overestimate low probability events, but underestimate high probability events.

Viscuzi suggests (1992, p. 22), "in particular, individuals overestimate risks such as the chance of dying in a tornado or being killed by botulism or a smallpox vaccination, whereas the truly substantial risks of death--such as the chance of dying of heart disease, stroke, or stomach cancer--tend to be underestimated." As Viscuzi shows, this does not reflect a cognitive failure, but could simply result as a lack of initial information. As their prior beliefs are updated, they will get closer and closer to the truth (p. 23). Viscuzi also highlights two studies by Slovic, et al, which showed that risks which received the greatest media attention (measured by newspaper coverage) were the most likely to be overestimated (p. 25). Given the increasingly negative coverage of tobacco outlined in this chapter, one could expect that the risks of tobacco would be overestimated, if those studies are to be believed. In fact, Viscuzi's research shows just this,

⁴⁷ Another alternative is that people correctly perceive the low risk of ETS, but weigh that against the nonexistent benefits (for them) and therefore support restrictions. While personal actions against ETS may be costly to voters (in terms of alienating friends who smoke for instance), public actions cost nonsmokers little.

Whereas the best scientific estimates of the lifetime lung cancer risks from smoking range from .05 to .10, individual perceptions of the risk are much greater. The entire population assesses this risk at .43, and even current smokers have a substantial risk perception of .37. The fraction of the population underassessing the risk is less than 10 percent, and the extent of their risk underestimation is comparatively small in magnitude (Viscuzi, p. 7).

Whatever the reason behind nonsmokers' ire at cigarettes, there was little doubt as to the public's overall conclusion (noted in the poll results above), ETS should be regulated. Political entrepreneurs are not unaware of such changes in opinion, and the early '90s saw two characters emerge to lead the anti-tobacco movement, FDA Commissioner David Kessler, and Rep. Henry Waxman, Chairman of the House Energy and Commerce Committee. Mr. Kessler, after ignoring the tobacco issue for over three years (especially his tenure in the Bush Administration), advocated regulating cigarettes as a nicotine delivery device in 1994 (Schwartz, 1994a, p. 1). While historically tobacco was not addressed by the FDA, since tobacco was not classified as either a food or a drug, Kessler saw an opening for regulation based on the nicotine within tobacco.

Previously the FDA had engaged in regulation of nicotine delivery systems used in smoking cessation programs such as nicotine gum or skin patches (Schwartz, p. 1), but had ignored tobacco. To aid in his attempt to regulate tobacco, Kessler teamed with Waxman in public hearings throughout 1994 with charges against the industry. Kessler claimed that the industry deliberately manipulated the level of nicotine within a cigarette to keep a smoker addicted, citing numerous industry patents (focusing on nicotine

delivery) and other internal industry documents, including Brown and Williamson's development of high nicotine content tobacco leaf (Schwartz, p. 1).

While this was underway, the ABC news program Day One alleged that the tobacco companies "spiked" the nicotine content of cigarettes to keep smokers hooked. While ABC was eventually forced to recant this story with a public apology and pay Philip Morris' legal fees after being sued for libel (Schwartz, p. 1), this contributed to the public case against tobacco. The FDA ultimately declared that it had regulatory power over nicotine as a drug in 1995, and President Clinton approved proposed FDA regulations in 1996. The industry sued to halt implementation, and after initially losing before Judge Osteen, was upheld at the circuit court level and finally at the U.S. Supreme Court in 2000 (Borio, pp. 32-36). While unsuccessful in actually regulating nicotine, Kessler's pressure significantly helped create the climate which resulted in the industry's pursuit of an overarching tobacco settlement.

Kessler often teamed with Rep. Henry Waxman (prior to the Republican takeover of Congress in 1994) against the tobacco industry. Waxman was known as a fierce partisan and anti-tobacco crusader. Perhaps his most noteworthy achievement came in April of 1994, when his committee put the CEOs of the seven largest tobacco companies under oath, and asked if they believed smoking was addictive (Schwartz, 1994b, p. A16). Each of the industry leaders denied that tobacco was addictive, much to the public consternation of the committee members. The nature of addiction is complex; many economists suggest the term is meaningless—that when one is supposedly addicted this simply means the costs of quitting are higher than the benefits. Alternatively, some

suggest that tobacco effects different people differently. Under this explanation, some could be hopelessly addicted while still acknowledging that many millions have successfully quit, some with little effort. But whether or not the industry leaders had legitimate reasons to question the addictiveness of tobacco, the reality was that it was bad politics in a society where everyone "knows" tobacco hooks people. Fortunately for the industry, Rep. Waxman's tenure in charge was to be curtailed that November, as the House leadership changed.

Political changes were not the only mechanism in transferring ownership of tobacco profits to other parties, legal changes were responsible as well. One of the major changes in common law in the 20th century was the shift from a contributory negligence standard to comparative negligence. Under a pure contributory negligence standard, two questions were asked. First, was the tort defendant negligent? If not, the case was over. Secondly, if the defendant was negligent, then was the plaintiff negligent as well? If so, then the plaintiff lost and was entitled to no relief (Posner, p. 186). Under a pure comparative negligence standard fit both the defendant and plaintiff were jointly negligent, the court would grant damages to the plaintiff according to the relative fault, i.e., if a defendant was 80 percent responsible for the accident, he would pay 80 percent of the costs. Posner argues that a contributory negligence system is efficient, in that it provides the proper incentives to both plaintiff and defendant to expend the appropriate amount of resources to prevent the tort, and this efficiency is why the common law "allowed the cost of the accident to lie where it fell, in order to minimize the cost of

administering the legal system (p. 187)." A shift to comparative negligence also provides efficiency in allocating appropriate safety resources, but according to Posner, does so at a higher cost: the cost of determining relative fault, and the cost that additional uncertainty levies on the court system (p. 189).

Despite Posner's contention that a comparative negligence standard increases costs, almost all states have changed to some form of comparative negligence during the last half century. As of 1992, comparative negligence has replaced contributory negligence in all but six states and the District of Columbia (Low, note 1). This change has made it more attractive to sue tobacco manufacturers, as 1) the damages due to tobacco-related illnesses may be quite significant, 2) even if the smoker bore most of the responsibility, given the large potential damages, the smoker stands to gain, 3) the expansion of punitive damages offers even more incentive, and 4) tobacco companies obviously have deep pockets. The trial lawyers have been vocal proponents of this expansion in comparative negligence, and they have a compelling argument politically: Why should someone who is 90 percent responsible for an accident get totally off the hook while someone who is only 10 percent responsible bears all the costs? Posnerian arguments over efficiency and transaction costs are simply less compelling in a political environment—especially when the person bearing the costs is the "little guy" and the one primarily responsible is often "big business." The fact that this means more money for trial lawyers is not simply self evident; Low and Smith found that "on average,

⁴⁸ There are three other forms of comparative negligence used in different states, which are somewhat inbetween contributory and comparative negligence. See Low, note 3 for a description of these standards.

comparative negligence provides stronger incentives to hire attorneys and file lawsuits and is associated with higher dollar awards (p. 535).

The result of this process of changing demographics, public opinion, scientific consensus and political entrepreneurship was a change in the property rights of tobacco profits and smokers' incomes. As discussed in Chapter Two, the need for tax revenue due to large fiscal deficits was a driver in the increasing political pressure on tobacco. While tobacco was always subject to taxation (beginning with King James I), the levels dramatically increased in the '80s and especially the '90s, and are scheduled to rise much further as part of the Master Settlement Agreement. 49

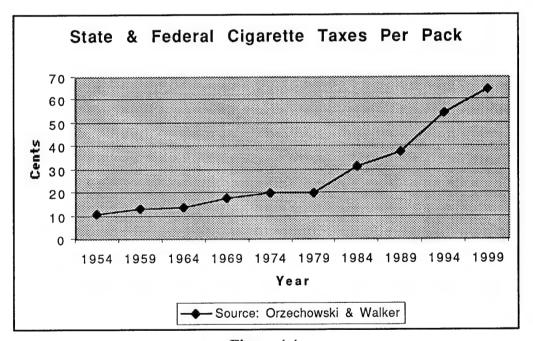


Figure 4.4

⁴⁹ While the numbers that follow do not reflect the MSA, they really should (so the increases are much larger), as the result is the same thing as a tax increase, see discussion in Chapter Two.

As seen in Figure 4.4 above, the average taxes per pack⁵⁰ was fairly stable until 1983. The strong committee leadership by southern Democrats was sufficient to inhibit most of the actions against tobacco, including federal excise taxes. But as more of the South became Republican, and committee leadership changed (as well as public opinion), it became more difficult to stem the tide. Figure 4.5 below shows the actual tax receipts of both the states and the federal government. While initially the states received relatively little via cigarette taxes, by the late '60s their take exceeded that of the federal government, and is now stretching firmly away.

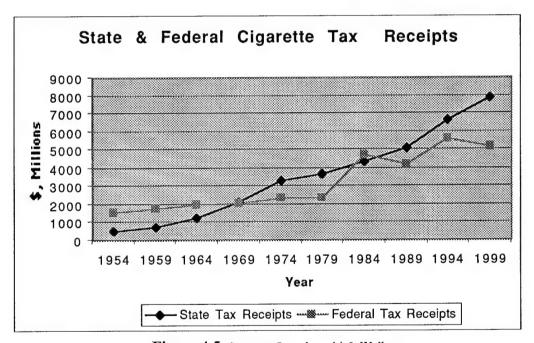


Figure 4.5 Source: Orzechowski & Walker

⁵⁰ As calculated by Orzechowski & Walker, Table 13, the data are from the average (median) for all states. This does not include any county or city taxes, and some areas do have these.

According to the R.J. Reynolds web site, the government (federal, state, and local) makes seven times the amount on taxes per pack of cigarettes as the company does in profit.

The tremendous growth in tobacco tax revenues, in times of rapidly declining per capita cigarette sales⁵¹, is indicative of the reallocation of tobacco profits and smoker's incomes to governments.

One could consider much of the action against tobacco as contesting the existing distribution of tobacco profits. When the government's share is approximately constant, no action is taken against the industry. But as the industry begins to gain more profit relatively, the government reasserts its claim to the stream of income. As indicated by Figure 4.6 below, the U.S. government revenue was dramatically higher than the industry's net income, and the proportion stayed roughly the same throughout the '50s and '60s. But beginning in the '70s, the industry's share started rising. The government raised taxes significantly to reassert its share in the early '80s. Unfortunately, this data is only available through 1985 as the industry results began being reported along with food industry data (due to the tobacco companies mergers with food companies such as Kraft). However, another way to look at this issue is where each dollar of cigarette income goes. In Figure 4.7, we see that the industry share went up from 1980 to 1991, and the tax share went down. But the large tax increases in the 1990s have reversed that trend by 1998.

⁵¹ Per capita cigarette consumption peaked in 1974 at approximately 145 packs. The latest number is 80.8, which is about the consumption of the U.S. in 1942. See Orzechowski & Walker, p. 3.

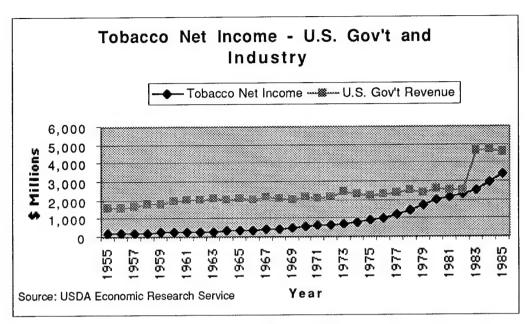


Figure 4.6

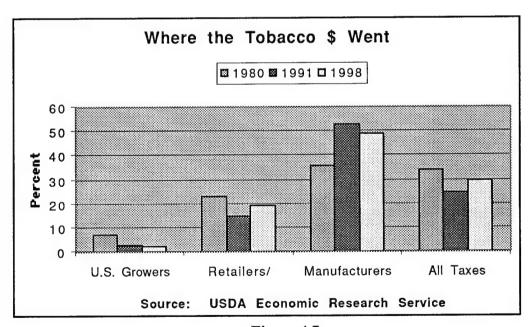


Figure 4.7

Discussion

Earlier in this chapter, I argued that a change in property rights is a process, with initial conflict over rights due to increasing scarcity. This conflict would be fought in a political arena, with changing opinion and political entrepreneurship necessary to actually affect a change. This process would sometimes lead to change, in other times it would not. How does the historical review of the last half-century discussed in section three fit with this hypothesis?

Increasing scarcity was especially noticed in the search for government tax revenues. The presence of large budget deficits and public hostility to additional increases in income taxes led to increased conflict over tobacco profits. Nearly half of all adult Americans were smokers in the late '40s (Borio, p. 16), but by the early '90s this number had dropped below 25 percent. This demographic change had profound implications. First, smokers were less able to resist any politically driven changes in tax rates. Secondly, the inverse of the number of smokers was the number of nonsmokers, who did not like being subjected to smoke in any public environment. This raises the second aspect of scarcity, the scarce air that all of us breath. When smokers were a large part of the voting population, one could expect their desires on public air to hold, but as their relative numbers fell, one should expect nonsmokers to exert more influence.

Conflict over scarcity, however, is insufficient to effect the change in rights. This conflict simply begins the process. For change to occur, public opinion must change, followed by political reassignment of rights. In our review of history, we saw significant changes in public opinion regarding tobacco, both on its effects on smokers and also on

the rights of nonsmokers to breath clean air. The increasing numbers of scientific reports, even if only statistical in nature, were confirmatory of common knowledge that smokers were generally shorter of breath, and often developed recurrent coughs. As public opinion changed, political entrepreneurs attempted to create demand for their services. In some cases, they were premature, as in the case of Senator Neuberger. But as opinion changed, and demographics changed, and as "independent" government action (such as the Surgeon General's report on smoking), the environment increasingly became supportive of a change in rights. In many cases, bureaucrats led regulatory change. And as these changes affected the social norms regarding smoking, it opened the door for political entrepreneurs such as Representative Waxman and Mississippi Attorney General Mike Moore.

Obviously this change did not occur overnight, and the process of change was subject to ups and downs. Yet the outcome of the process has been a steady increase in the tax revenue from cigarettes, as discussed above. In addition, there has been a steady increase in public areas that are "off limits" to smoking, as the conflict over rights to air has been won by the nonsmokers. The detailed historical review of section three fits very well with the process of change outlined at the end of section two. But how well does this process fit with the views of property rights outlined in section two (from a positive as opposed to normative perspective)?

A Sunstein vision seems to fit the circumstances we see--since Sunstein sees property as a political right, the use of the political process to reassign rights seems consistent. Sunstein acknowledges that there is a potential conflict between property

rights and democracy (p. 208). If property rights are very secure, this limits the ability of democracy to redistribute wealth. In our analysis, there is little to suggest that the property rights were ever that secure. When nonsmokers became the dominant voting bloc, the tobacco companies and smokers found their property rights under increasing pressure. It is true, however, that the property rights were made less secure as public opinion changed.

Bromley (1997) supports a Sunsteinian view of property, and suggests "the problem here is not one of protecting, or failing to protect, property rights. Rather, the problem is to discover the more legitimate property claim (p. 8)." If this is true, it simply takes the problem one step back: what is the basis for legitimacy of differing property rights claims? If we rely on elected government for legitimacy, this ensures that every property right is continually up for negotiation, as the popular will changes. Sunstein recognizes that stability is necessary for planning, and pins his hope that a well-designed constitution will be able to prevent continuous political revision (p. 204). If the tobacco industry relied on a well-designed constitution for the protection of their rights, they were surely disappointed; recall from Chapter Two that both Florida and Maryland changed their laws after the alleged misconduct occurred to prevent any possible tobacco legal defense in those states' Medicaid suits.

Demsetz's view of why property rights change (as opposed to how they change) partially reflects our historical review. Demsetz suggested that property rights would change as the benefits of internalization of externalities exceeded the costs, and this change would usually follow a change in knowledge. In fact, as knowledge of how

cigarette smoking affected both the smoker and nonsmoking public changed, the benefits of a change in property rights undoubtedly increased in the minds of many voters. And as the costs were primarily borne by smokers, who as a group were steadily decreasing in proportion, the costs of a change were going down as well. One should expect that as benefits increase and costs come down, there must be an eventual intersection to support a change in property rights. Demsetz's view seems to especially fit the issue of smoke and public air itself, the classic externality issue; this view seems much less able to explain the loss of tobacco profits and smokers' incomes.

Riker's political theory of property rights perhaps offers insights into the process of creating original rights, but is clearly inadequate to describe the changes illustrated in the tobacco case. Riker notes that rule makers must desire to recognize the right, and will do so when the benefits to the government are less than the costs of enforcing the right (p. 955). Yet the critical issue is how the cost/benefit analysis changes over time to reallocate rights. The process of conflict over scarcity and changing opinion leading to political reallocation is not addressed in his model, yet without conflict and a change of opinion, reallocation is not possible, as the status quo is preferred.

Conclusion

This chapter reviewed three different views of property rights, and how those rights are subject to change. If one views tobacco policy in the last 50 years as reflecting changing claims to the industry's profits, one must understand the process of change. This change reflects increasing scarcity, and conflict as a result of that scarcity. This conflict may or may not lead to a change in the ownership of property rights; it will start

a process that includes changing public opinion and political entrepreneurship. If the public opinion shifts enough to provide the incentive for political entrepreneurs to act, we are likely to see a change in property rights. A historical review found growing scarcities, both with tax revenue and air itself. Conflict did arise, with both sides of the argument engaging in concerted efforts to control public opinion for their benefit. We also saw the demographics and opinion dynamics change sufficiently that a change in property rights has occurred: we now have far higher tobacco taxes than ever before, and smoking is allowed in fewer public locations than ever before.

This process of change, as it relies on government enforcement, most closely fits Riker's view of property rights. With government the source of all property rights in this view, including the product of our individual labor, our property is just as secure as the political will allows it. This will undoubtedly bring comfort to those most powerful in the political marketplace, but will likely evoke alarm from those who are comparatively weak.

Appendix A Empirical Issues

CRSP Program

In this dissertation, the Center for Research in Security Prices (CRSP) database was used to measure market indices and individual stock returns. The CRSP program is considered by many to be the premier historical price data provider. This program offers numerous features, included returns, distributions, dividends, closing bid/ask, number of trades, etc., for both daily and monthly intervals. While the program offers significant flexibility and capabilities, the data required for the event studies performed herein were obtainable with minimal effort, and only two modules of CRSPAccess were used.

The first module, TS_PRINT, was used to identify the specific PERMNOs, or stock identifiers used by the program to calculate returns. The interested user can download a copy of the CRSP Utilities Guide for specific instructions on how to operate TS_PRINT. The program allows one to select PERMNOs with a company name, CUSIP, or stock ticker. The PERMNOs are used in a separate module, DSXPORT, to calculate daily returns on a stock portfolio (which can be a portfolio of one stock). When operating DSXPORT, one needs the PERMNO of each stock, the beginning and ending date for the calculation, and the index that is being compared. For instance, Digital Lightwave has a PERMNO of 84525 and was compared to the S&P 500 Index (w/dividend reinvesting). I chose the S&P 500 index for all regressions, although many other indices were available as well. DSXPORT saves output to a file of the users choosing, which may then be opened with a text program such as notepad and copied into

Excel for further manipulation. All of the original data downloaded from CRSP are available upon request in Microsoft Excel.

Event Study Notes

The empirical work in this dissertation consists primarily of conducting event studies. Event studies are widely used in such fields as finance and law and economics; any area which needs to know the effect of an economic event on the value of a firm. For instance, a law and economics study may desire to measure the impact on the value of a firm of a new regulation (Campbell, p. 149). Campbell notes the general applicability of event study methodologies has led to its wide use in disparate fields. And despite the issues noted below, Brown and Warner find that daily data event study results are robust across a wide variety of conditions (Brown, p. 3).

Event studies require several assumptions, such as efficient markets and the vector of returns is independently multivariate normally distributed. As noted in the discussion in Chapter Two, most information is priced into the stock market within 15 minutes of its public release—certainly fitting within the duration of our event windows. The vector of returns must be independently multivariate normally distributed in order to calculate abnormal returns used within the event study. However, even with this assumption, sampling errors could lead to serial correlation of the abnormal returns even though the true disturbances are independent through time (Campbell, p. 160). However, as the length of the estimation window becomes large, this error becomes zero. Thus most event studies use estimation windows of 200 days, as in this dissertation.

Brown notes four issues regarding event studies (three listed here). 1) the distributions of daily returns are fat-tailed relative to the normal distribution, 2) If the security and market index are measured over a different trading interval, OLS estimates are biased and inconsistent, 3) issue #2 can lead to excess returns exhibiting serial dependence. Appeal to the central limit theorem eliminates issue #1, as the number of securities increases. For issues 2 and 3, the CRSP data set calculates both individual stock and index returns over the same time period. Using simulation techniques and actual data, Brown shows that with large estimation windows and large numbers of securities, the OLS market model (such as used in this dissertation) provides results that are robust and well specified over a wide variety of conditions (p. 25). Furthermore, procedures other than OLS "convey no clear cut benefit in detecting abnormal performance (p. 26)."

Appendix B

Table B.1
Securities Class Action Lawsuits

Company	Threat Date	Retraction Date
Hills Stores	24 Aug 1994	30 Sep 1994
IKON	14 Aug 1998	24 Nov 1999
Itron, Inc.	27 May 1997	3 Jun 1999
UCAR, International	1 Apr 1998	14 Oct 1999
Goody's Family Clothing	24 Nov 1993	6 Apr 1993
National Media Corp	9 Jun 1993	20 Mar 1995
PerSeptive Biosystems	27 Dec 1994	30 May 1995
Radius, Inc.	14 Sep 1992	2 Feb 1995
RasterOps	11 Jun 1992	18 Apr 1995
Gensia, Inc.	18 Nov 1994	30 Mar 1995
DonnKenny	12 Nov 1996	7 Oct 1999
Marcum Corp	22 Aug 1994	25 Apr 1996
Porta Systems Corp	8 Apr 1993	30 Nov 1995
Medical Resources Inc	14 Nov 1997	21 Dec 1998
USX	15 Sep 1993	19 Jan 1996
Applied Magnetics	25 Oct 1993	18 Nov 1994
Compression Labs	10 Aug 1992	4 Apr 1995
Employee Solutions	17 Mar 97	17 Nov 1998
Digital Systems	4 Nov 1991	14 May 1993
Laserscope	6 Mar 1991	4 Jul 1991
Immunex	3 Apr 1992	9 Mar 1994
NeoRx	25 May 1994	23 Feb 1995
PS Group	27 May 1992	24 Mar 1995
SciMed Life Systems	27 Sep 1991	29 Sep 1994
Anadigics Inc.	2 Mar 1998	23 Jul 1999
Aura Systems	28 Apr 1997	15 Oct 1998
Casino Data Systems	14 Jan 1997	2 Sep 1998
Digital Lightwave	23 Jan 1998	29 Jul 1998
Exide Corp	1 May 1998	14 Apr 1999
Informix Corp	11 Apr 1997	26 May 1999

Table C.1

Results: Equation One Threat Period										
Company		(-1, +1)			(-5, +3)		(-20, +10)			
	Yi	S.E.	Y _i /S.E.	Y_i	S.E.	Y _i /S.E.	Y_i S.E. $Y_i/S.E$.			
Hills Stores	0.0045	0.0134	0.3335	0.0075	0.0058	1.3017	0.0035	0.0031	1.1322	
IKON	-0.0213	0.0248	-0.8592	-0.0182	0.0142	-1.2801	-0.0127	0.0088	-1.4437	
Itron, Inc.	0.0455	0.0363	1.2548	0.0037	0.0187	0.1994	0.0114	0.0100	1.1405	
UCAR	0.0294	0.0660	0.4454	0.0077	0.0085	0.9061	0.0036	0.0049	0.7306	
Goody's	0.2110	0.1984	1.0631	-0.0083	0.0112	-0.7410	0.0013	0.0062	0.2139	
National	-0.0780	0.0326	-2.3911	0.0056	0.0172	0.3241	-0.0137	0.0087	-1.5721	
Media Corp										
PerSeptive	-0.1124	0.0293	-3.8418	0.0021	0.0194	0.1102	-0.0026	0.0110	-0.2351	
Biosystems										
Radius	-0.0204	0.0278	-0.7345	-0.0343	0.0162	-2.1211	-0.0232	0.0092	-2.5317	
RasterOps	0.0072	0.0314	0.2287	-0.0415	0.0196	-2.1186	-0.0051	0.0104	-0.4899	
Gensia	0.1363	0.0594	2.2939	0.0146	0.0231	0.6313	0.0126	0.0112	1.1266	
DonnKenny	-0.1728	0.0839	-2.0595	-0.1137	0.0311	-3.6521	-0.0473	0.0112	-4.2350	
Marcum	-0.0120	0.0289	-0.4137	-0.0049	0.0166	-0.2941	0.0012	0.0094	0.1291	
Corp										
Porta	-0.0821	0.0289	-2.8376	-0.0592	0.0137	-4.3357	-0.0130	0.0082	-1.5830	
Systems									2 22 72	
Medical	0.1263	0.0630	2.0059	-0.0090	0.0141	-0.6355	-0.0213	0.0079	-2.6970	
Resources						4 2524	0.0000	0.0044	0.4450	
USX	-0.0018	0.0152	-0.1168	-0.0080	0.0076	-1.0521	0.0006	0.0044	0.1452	
Applied	-0.0349	0.0255	-1.3707	-0.0034	0.0141	-0.2402	-0.0066	0.0080	-0.8267	
Magnetics	0.4400	0.0404	0.0000	0.0040	0.0257	-0.9707	-0.0141	0.0091	-1.5601	
Compressio	-0.1169	0.0494	-2.3638	-0.0249	0.0257	-0.9707	-0.0141	0.0091	-1.5001	
n Labs	-0.1434	0.0324	-4.4230	-0.0944	0.0220	-4.2963	-0.0305	0.0124	-2.4575	
Employee	-0.1434	0.0324	-4,4230	-0.0944	0.0220	-4.2903	-0.0303	0.0124	-2.4070	
Solutions	-0.0314	0.1320	-0.2381	0.0065	0.0165	0.3952	0.0051	0.0085	0.6073	
Digital Systems	-0.0314	0.1320	-0,2301	0.0003	0.0103	0.5552	0.0001	0.000	0.0070	
Systems Laserscope	-0.0552	0.0269	-2.0526	-0.0277	0.0145	-1.9115	-0.0221	0.0077	-2.8653	
Immunex	-0.0969	0.0210	-4.6243	-0.0448	0.0151	-2.9716	-0.0179	0.0073	-2.4457	
NeoRx	0.1818	0.0808	2.2511	0.0089	0.0128	0.6973	-0.0008	0.0064	-0.1234	
PS Group	0.0068	0.0203	0.3367	0.0095	0.0116	0.8174	0.0050	0.0064	0.7820	
SciMed Life	-0.1658	0.0213	-7.7951	-0.0555	0.0130	-4.2642	-0.0194	0.0078	-2.4896	
Systems			, ,,,							
Anadigics	-0.0208	0.0512	-0.4051	-0.0284	0.0192	-1.4801	-0.0347	0.0118	-2.9285	
Inc.										
Aura	-0.0698	0.0685	-1.0196	-0.0215	0.0219	-0.9806	0.0022	0.0103	0.2103	
Systems										
Casino Data	-0.0299	0.0303	-0.9885	-0.0188	0.0204	-0.9211	-0.0195	0.0091	-2.1410	
Systems										
Digital	-0.2144	0.0616	-3.4793	-0.1186	0.0234	-5.0748	-0.0378	0.0138	-2.7447	
Lightwave										
Exide Corp	-0.0196	0.0227	-0.8610	-0.0096	0.0084	-1.1398	0.0031	0.0048	0.6463	
Informix	-0.0076	0.0291	-0.2592	-0.0067	0.0145	-0.4653	-0.0238	0.0082	-2.8848	
Corp										

Table C.2

	Results: Equation Two Threat Period									
Company	(-1, +1)				(-5, +3)			(-20, +10)		
	Y _i S.E. Y _i /S.E.			Y_i	Y_i S.E. $Y_i/S.E$.			S.E.	Y _i /S.E.	
Hills Stores	-0.0023	0.0086	-0.2677	0.0028	0.0051	0.5452	0.0026	0.0029	0.8861	
IKON	-0.0087	0.0245	-0.3557	-0.0190	0.0143	-1.3296	-0.0132	0.0084	-1.5656	
itron, Inc.	0.0394	0.0266	1.4812	0.0091	0.0156	0.5830	0.0089	0.0091	0.9848	
UCAR	0.0087	0.0143	0.6101	0.0078	0.0083	0.9300	0.0013	0.0048	0.2643	
Goody's	0.0017	0.0185	0.0924	-0.0119	0.0108	-1.0983	0.0018	0.0062	0.2962	
National Media Corp	-0.0068	0.0262	-0.2616	0.0111	0.0153	0.7267	-0.0137	0.0087	-1.5807	
PerSeptive Biosystems	-0.1236	0.0319	-3.8806	-0.0178	0.0193	-0.9212	-0.0099	0.0110	-0.8946	
Radius	-0.0241	0.0280	-0.8627	-0.0377	0.0162	-2.3252	-0.0243	0.0092	-2.6288	
RasterOps	0.0018	0.0304	0.0591	-0.0444	0.0176	-2.5262	-0.0027	0.0102	-0.2633	
Gensia	0.0177	0.0331	0.5335	0.0120	0.0195	0.6147	0.0108	0.0110	0.9788	
DonnKenny	-0.0602	0.0310	-1.9436	-0.0649	0.0179	-3.6286	-0.0370	0.0102	-3.6418	
Marcum Corp	-0.0109	0.0266	-0.4103	-0.0129	0.0156	-0.8319	0.0020	0.0089	0.2213	
Porta Systems	-0.0839	0.0237	-3.5439	-0.0581	0.0137	-4.2501	-0.0126	0.0081	-1.5511	
Medical Resources	0.0094	0.0242	0.3895	-0.0085	0.0141	-0.6060	-0.0215	0.0079	-2.726	
USX	-0.0009	0.0130	-0.0697	-0.0078	0.0076	-1.0262	0.0004	0.0044	0.0909	
Applied Magnetics	-0.0162	0.0237	-0.6837	-0.0009	0.0139	-0.0664	-0.0065	0.0079	-0.8242	
Compressio n Labs	-0.0520	0.0270	-1.9271	-0.0023	0.0160	-0.1425	-0.0136	0.0091	-1.4966	
Employee Solutions	-0.1209	0.0358	-3.3755	-0.0869	0.0208	-4.1802	-0.0282	0.0122	-2.3026	
Digital Systems	-0.0003	0.0253	-0.0131	0.0029	0.0148	0.1947	0.0050	0.0084	0.5941	
Laserscope	-0.0723	0.0230	-3.1460	-0.0554	0.0132	-4.1806	-0.0255	0.0077	-3.3330	
Immunex	-0.0996	0.0210	-4.7384	-0.0396	0.0128	-3.0877	-0.0179	0.0073	-2.4553	
NeoRx	0.0011	0.0190	0.0602	0.0100	0.0111	0.9049	-0.0015	0.0063	-0.242	
PS Group	0.0082	0.0192	0.4261	0.0071	0.0107	0.6595	0.0049	0.0064	0.7693	
SciMed Life Systems	-0.1304	0.0210	-6.1999	-0.0542	0.0129	-4.2112	-0.0193	0.0076	-2.540	
Anadigics	-0.0384	0.0321	-1.1950	-0.0259	0.0188	-1.3800	-0.0229	0.0107	-2.1370	
Aura Systems	-0.0451	0.0302	-1.4920	-0.0161	0.0177	-0.9137	0.0023	0.0100	0.232	
Casino Data Systems	-0.0020	0.0272	-0.0740	0.0084	0.0160	0.5224	-0.0180	0.0090	-2.003	
Digital Lightwave	-0.2635	0.0371	-7.1040	-0.1035	0.0231	-4.4853	-0.0340	0.0136	-2.497	
Exide Corp	-0.0186	0.0143	-1.3033	-0.0095	0.0084	-1.1331	0.0031	0.0048	0.645	
Informix Corp	0.0225	0.0250	0.9033	-0.0098	0.0145	-0.6768	-0.0208	0.0082	-2.519	

Table C.3

IKON	Results: Equation One Retraction Period									
Yi	Company		(-1, +1)			(-5, +3)		((-20, +10))
Hills Stores					Y_i	S.E.	Y _i /S.E.	Yi	S.E. Y	$I_i/S.E.$
Ikron 0.0430 0.0253 1.6984 0.0119 0.0155 0.7676 0.0008 0.0080 0.0110 0.0165 0.7676 0.0008 0.0080 0.0110 0.0167 0.0033 0.0107 0.0003 0.0107 0.0003 0.0107 0.0003 0.0107 0.0003 0.0107 0.0003 0.0007 0.0003 0.0007 0.0003 0.0007 0.0100 0.0003 0.0007 0.0100 0.0003 0.0007 0.0100 0.0003 0.0002 0.0007 0.00003 0.0002 0.0007 0.0003 0.0002 0.0007 0.0003 0.0002 0.0007 0.0003 0.0002 0.0007 0.0003 0.0002 0.0007 0.0003 0.0002 0.0007 0.0003 0.0002 0.0007 0.0003 0.0002 0.0007 0.0003 0.0002 0.0007 0.0003 0.0002 0.0007 0.0003 0.0002 0.0007 0.0003 0.0002 0.0003 0.0002 0.0003 0.0002 0.0003 0.0002 0.0003 0	Hills Stores							-0.0029	0.0028	-1.0354
Itron, Inc. -0.0943 0.0509 -1.8541 -0.0221 0.0192 -1.1547 0.0003 0.0107				1.6984	0.0119	0.0155	0.7676	0.0008	0.0080	0.0963
UCAR						0.0192	-1.1547	0.0003	0.0107	0.0308
Goody's 0.2257 0.2270 0.9940 0.0165 0.0179 0.9206 0.0047 0.0100 0.01010 0.01010 0.1076 0.1344 -0.8008 0.0089 0.0177 0.5030 0.0022 0.0097 0.0086 0.0089 0.0177 0.5030 0.0022 0.0097 0.0086 0.0089 0.0171 0.0218 0.7829 0.0134 0.0124 0.0188 0.0089 0.0171 0.0218 0.7829 0.0134 0.0124 0.0188 0.0187 0.0218 0.0089 0.0134 0.0124 0.0183 0.0140 0.0090 0.0187 0.0208 0.8993 -0.0084 0.0128 0.0187 0.0208 0.8993 -0.0084 0.0128 0.0187 0.0208 0.8993 -0.0084 0.0128 0.0187 0.0208 0.8993 0.0084 0.0128 0.0008 0.0086 0.0086 0.0187 0.0208 0.8993 0.0084 0.0128 0.0008 0.0086 0.0					-0.0079		-0.7311	-0.0114	0.0054	-2.0983
National Media Corp								0.0047	0.0100	0.4691
Media Corp PerSeptive Biosystems 0.0236 0.0368 0.6419 0.0171 0.0218 0.7829 0.0134 0.0124 Biosystems 0.0331 0.0409 0.8078 -0.0147 0.0165 -0.8913 0.0140 0.0090 0.0090 0.0142 0.0457 0.3106 0.0187 0.0208 0.8993 -0.0084 0.0128 -0.0142 0.0457 -0.3106 0.0154 0.0226 0.4718 0.0045 0.0143 0.0102 0.0142 0.0235 0.0080 0.0230 0.0080 0.0226 0.4718 0.0045 0.0143 0.0143 0.0144 0.0102 0.0442 0.2305 0.0080 0.0223 0.0144 0.0102 0.0442 0.2305 0.0080 0.0230 0.0080 0.0206 -0.5625 -0.0037 0.0080 0.0270 0.0077 0.0080 0.0246 0.0238 0.0544 0.2361 0.0064 0.0294 0.2178 0.0129 0.0162 0.0170 0.0170 0.0080 0.0080 0.0129 0.0162 0.0081 0					0.0089	0.0177	0.5030	0.0022	0.0097	0.2224
PerSeptive Biosystems Radius 0.0236 0.0368 0.6419 0.0171 0.0218 0.7829 0.0134 0.0124 Radius 0.0331 0.0409 0.8078 -0.0147 0.0165 -0.8913 0.0140 0.0090 -0.8881 -0.0142 0.0457 -0.3106 0.0187 0.0208 0.8993 -0.0084 0.0128 -0.0182 -0.0142 0.0457 -0.3106 0.0154 0.0326 0.4718 0.0045 0.0143 0.0046 0.0188 -0.00188 -0.0352 0.0302 -1.1661 -0.0116 0.0206 -0.5625 -0.0037 0.0080 -0.0080										
Biosystems Radius 0.0331 0.0409 0.8078 -0.0147 0.0165 -0.8913 0.0140 0.0090 0.8078 -0.0147 0.0165 -0.8913 0.0140 0.0090 0.8078 -0.0188 0.0187 0.0208 0.8993 0.0084 0.0128 -0.6681 0.0142 0.0457 0.3106 0.0154 0.0326 0.4718 0.0045 0.0143 0.0166 0.0154 0.0326 0.4718 0.0045 0.0143 0.0168 0.0168 0.0084 0.0283 0.0080 0.0253 0.0254 0.0254 0.0064 0.0294 0.0218 0.0218 0.0218 0.0218 0.0224 0.0037 0.0288 0.0254 0.0075 0.0146 0.0075 0.0286 0.0024 0.0071 0.0075 0.0080 0.0244 0.0071 0.0075 0.0080 0.0254 0.0034 0.0048 0.0074 0.0080 0.0085		0.0236	0.0368	0.6419	0.0171	0.0218	0.7829	0.0134	0.0124	1.0781
Radius	•									
RasterOps		0.0331	0.0409	0.8078	-0.0147	0.0165	-0.8913	0.0140	0.0090	1.5588
Gensia -0.0142 0.0457 -0.3106 0.0154 0.0326 0.4718 0.0045 0.0143 0.00nkenny 0.0964 0.0923 1.0447 0.0102 0.0442 0.2305 0.0080 0.0253 0.0080 0.0254 0.0254 0.0254 0.0084 0.0294 0.2178 0.0129 0.0162 0.0254 0.0254 0.0084 0.0254 0.0084 0.0254 0.0084 0.00		-0.0105	0.0582	-0.1808	0.0187	0.0208	0.8993	-0.0084	0.0128	-0.6560
DonnKenny Donnke Donn		-0.0142	0.0457	-0.3106	0.0154	0.0326	0.4718	0.0045	0.0143	0.3129
Marcum						0.0442	0.2305	0.0080	0.0253	0.3160
Corp Porta 0.0538 0.0567 0.9479 0.0615 0.0468 1.3147 -0.0036 0.0170 -0.0036 Systems Medical 0.0128 0.0544 0.2361 0.0064 0.0294 0.2178 0.0129 0.0162 0.0162 Hesources USX -0.0426 0.0288 -1.4824 -0.0021 0.0075 -0.2826 0.0024 0.0037 0.0071 -1.4824 -0.0021 0.0146 1.0726 -0.0142 0.0071 -1.4824 -0.0021 0.0163 0.0737 0.0071 -1.4824 -0.0021 0.0163 0.7738 0.0048 0.0071 -1.4824 -0.0157 0.0163 0.7738 0.0048 0.0074 0.0		-0.0352		-1.1661	-0.0116	0.0206	-0.5625	-0.0037	0.0080	-0.4591
Porta Systems System										
Medical Resources 0.0128 0.0544 0.2361 0.0064 0.0294 0.2178 0.0129 0.0162 0.0162 USX -0.0426 0.0288 -1.4824 -0.0021 0.0075 -0.2826 0.0024 0.0037 0.0071 Applied Magnetics 0.0168 0.2377 0.0707 0.0157 0.0146 1.0726 -0.0142 0.0071 -0.0071 Compressio n Labs 0.0709 0.0347 2.0408 0.0126 0.0163 0.7738 0.0048 0.0074 <td></td> <td>0.0538</td> <td>0.0567</td> <td>0.9479</td> <td>0.0615</td> <td>0.0468</td> <td>1.3147</td> <td>-0.0036</td> <td>0.0170</td> <td>-0.2107</td>		0.0538	0.0567	0.9479	0.0615	0.0468	1.3147	-0.0036	0.0170	-0.2107
Medical Resources 0.0128 0.0544 0.2361 0.0064 0.0294 0.2178 0.0129 0.0162 0.0162 USX -0.0426 0.0288 -1.4824 -0.0021 0.0075 -0.2826 0.0024 0.0037 0.0071 Applied Magnetics 0.0168 0.2377 0.0707 0.0157 0.0146 1.0726 -0.0142 0.0071 -0.0071 Compressio n Labs 0.0709 0.0347 2.0408 0.0126 0.0163 0.7738 0.0048 0.0074 <td>Systems</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Systems									
USX		0.0128	0.0544	0.2361	0.0064	0.0294	0.2178	0.0129	0.0162	0.7954
Applied Magnetics 0.0168 0.2377 0.0707 0.0157 0.0146 1.0726 -0.0142 0.0071 -1.00071 -	Resources									
Magnetics Compressio n Labs 0.0709 0.0347 2.0408 0.0126 0.0163 0.7738 0.0048 0.0074 0.0075 0.0075 0.0075 0.0078 0.0075 0.0075 0.0093 0.0085 0.0085 0.0085 0.0085 0.0075 0.0075 0.0075 0.0075 0.0075 0.0075 0.0075 0.0075 0.0075 0.0074 0.0075 0.0075 0.0074 0.0075 0.0074		-0.0426	0.0288	-1.4824	-0.0021	0.0075	-0.2826	0.0024	0.0037	0.6422
Compressio n Labs 0.0709 n Labs 0.0347 2.0408 n Labs 0.0126 n Labs 0.0163 n Labs 0.0738 n Labs 0.0048 n Labs 0.0074 n Labs 0.0074 n Labs 0.0074 n Labs 0.0016 n Labs 0.0259 n Labs 0.0259 n Labs 0.0259 n Labs 0.0259 n Labs 0.0128 n Labs 0.0259 n Labs 0.0259 n Labs 0.0128 n Labs 0.0128 n Labs 0.0016 n Labs 0.0128 n Labs 0.0016 n Labs 0.0015 n Labs 0.0009 n Labs 0.0016 n Labs 0.0015 n Labs 0.0009 n Labs 0.0015 n Labs 0.0009 n Labs 0.0015 n La	Applied	0.0168	0.2377	0.0707	0.0157	0.0146	1.0726	-0.0142	0.0071	-2.0068
Name	Magnetics									
Employee	Compressio	0.0709	0.0347	2.0408	0.0126	0.0163	0.7738	0.0048	0.0074	0.6576
Solutions Digital Digital Systems -0.0183 0.0331 -0.5539 0.0000 0.0166 0.0016 -0.0015 0.0093 -0.0093 -0.0093 -0.0093 -0.0093 -0.0093 -0.0093 -0.0093 -0.0093 -0.0093 -0.0093 -0.0093 -0.0093 -0.0093 -0.0093 -0.0093 -0.0085 -0.0093 0.0085 -0.0093 0.0085 -0.0093 0.0085 -0.0093 0.0085 -0.0093 0.0085 -0.0011 0.0075 -0.0011 0.0075 -0.0075	n Labs									
Digital Systems Casino Data Lightwave Casino Data Systems Casino Data Casino Ca	Employee	0.1264	0.0507	2.4945	0.0638	0.0217	2.9325	0.0259	0.0128	2.0285
Systems Laserscope -0.0305 0.0252 -1.2071 0.0006 0.0151 0.0415 -0.0093 0.0085 -1.2071 0.0006 0.0151 0.0415 -0.0093 0.0085 -1.2071 0.0006 0.0151 0.0415 -0.0093 0.0085 -1.2071 0.0006 0.0138 0.2282 -0.0011 0.0075 -1.2071 -1.2071 0.00138 0.0282 -0.0011 0.0075 -1.2072 -1.2072 0.0014 0.0218 0.6846 0.0058 0.0124 0.0078 0.0077 -0.3682 -0.0034 0.0041 -1.2072 0.0041 -1.2072 0.0055 0.0055 0.0055 0.0055 0.0069 0.0055 0.0055 0.0069 0.0055 0.0055 0.0069 0.0069 0.0055 0.0055 0.0069 0.0055 0.0055 0.0069 0.0069 0.0069 0.0055 0.0069 0.0069 0.0069 0.0055 0.0069 0.0069 0.0069 0.0069 0.0069 0.0069 0.0069 0.0069 0.0069 0.0069<	Solutions									
Laserscope -0.0305 0.0252 -1.2071 0.0006 0.0151 0.0415 -0.0093 0.0085 -Immunex Immunex 0.0237 0.0244 0.9694 0.0031 0.0138 0.2282 -0.0011 0.0075 -Immunex NeoRx -0.0863 0.1015 -0.8506 0.0149 0.0218 0.6846 0.0058 0.0124 0.0078 PS Group 0.0399 0.0210 1.8983 -0.0029 0.0077 -0.3682 -0.0034 0.0041 -Immunex SciMed Life 0.0152 0.0184 0.8256 0.0090 0.0098 0.9170 0.0069 0.0055 -Immunex Anadigics -0.1457 0.1017 -1.4323 -0.0078 0.0190 -0.4102 -0.0093 0.0103 -Immunex Aura -0.0253 0.0573 -0.4415 -0.0154 0.0211 -0.7267 -0.0088 0.0097 -Immunex Casino Data -0.0762 0.0340 -2.2416 -0.0025 0.0186 -0.1368	Digital	-0.0183	0.0331	-0.5539	0.0000	0.0166	0.0016	-0.0015	0.0093	-0.1588
Immunex 0.0237 0.0244 0.9694 0.0031 0.0138 0.2282 -0.0011 0.0075 -1 NeoRx -0.0863 0.1015 -0.8506 0.0149 0.0218 0.6846 0.0058 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0029 0.0077 -0.3682 -0.0034 0.0041 -0.0041 0.0041 -0.0069 0.0069 0.0069 0.0069 0.0069 0.0069 0.0069 0.0069 0.0055 0.0078 0.0190 -0.4102 -0.0093 0.0103 -0.0055 0.0103 -0.0013 0.0103 -0.0013 0.0103 -0.0013 0.0097 -0.0013 0.0097 -0.0013 0.0105 -0.0013 0.0105 -0.0013 0.0105 -0.0013 0.0105 -0.0013 0.0105 -0.0013 0.0105 -0.0013 0.0105 -0.0013 0.0105 -0.0013 0.0105 -0.0013 0.0105 -0.0013	Systems				ļ					
NeoRx -0.0863 0.1015 -0.8506 0.0149 0.0218 0.6846 0.0058 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0124 0.0029 0.0077 -0.3682 -0.0034 0.0041 -0.0041 -0.0041 -0.0055 0.0041 -0.0055 0.0055	Laserscope									-1.0983
PS Group 0.0399 0.0210 1.8983 -0.0029 0.0077 -0.3682 -0.0034 0.0041 -0.0041 SciMed Life Systems 0.0152 0.0184 0.8256 0.0090 0.0098 0.9170 0.0069 0.0055 Anadigics Inc. -0.1457 0.1017 -1.4323 -0.0078 0.0190 -0.4102 -0.0093 0.0103 -1.00103 Aura Systems -0.0253 0.0573 -0.4415 -0.0154 0.0211 -0.7267 -0.0088 0.0097 -1.0025 Casino Data Systems -0.0762 0.0340 -2.2416 -0.0025 0.0186 -0.1368 -0.0013 0.0105 -1.0025 Digital Lightwave -0.0852 0.0406 -2.0991 -0.0305 0.0284 -1.0733 0.0054 0.0139										-0.1467
SciMed Life Systems 0.0152 0.0184 0.8256 0.0090 0.0098 0.9170 0.0069 0.0055 Anadigics Inc. -0.1457 0.1017 -1.4323 -0.0078 0.0190 -0.4102 -0.0093 0.0103 -0.0103 Aura Systems -0.0253 0.0573 -0.4415 -0.0154 0.0211 -0.7267 -0.0088 0.0097 -0.0097 Casino Data Systems -0.0762 0.0340 -2.2416 -0.0025 0.0186 -0.1368 -0.0013 0.0105 -1.0733 0.0054 0.0139	NeoRx									0.4678
Systems -0.1457 0.1017 -1.4323 -0.0078 0.0190 -0.4102 -0.0093 0.0103 -1.00103 Inc. -0.0253 0.0573 -0.4415 -0.0154 0.0211 -0.7267 -0.0088 0.0097 -1.00103 Systems -0.0762 0.0340 -2.2416 -0.0025 0.0186 -0.1368 -0.0013 0.0105 -1.00105 Systems -0.0852 0.0406 -2.0991 -0.0305 0.0284 -1.0733 0.0054 0.0139 0.0139 Lightwave -0.00103 -0.0013<										-0.8329
Anadigics Inc. -0.1457 0.1017 -1.4323 -0.0078 0.0190 -0.4102 -0.0093 0.0103 -1.4323 -0.0078 0.0190 -0.4102 -0.0093 0.0103 -1.4323 -0.0078 0.0190 -0.4102 -0.0093 0.0103 -1.4323 -0.0078 0.0190 -0.4102 -0.0093 0.0103 -1.4323 -0.0015 -0.0154 0.0211 -0.7267 -0.0088 0.0097 -1.4323 -0.0015 -0		0.0152	0.0184	0.8256	0.0090	0.0098	0.9170	0.0069	0.0055	1.2652
National National										
Aura -0.0253 0.0573 -0.4415 -0.0154 0.0211 -0.7267 -0.0088 0.0097 -1.0097 -1.0097 -1.0098 0.0097 -1.0099 -1.00	_	-0.1457	0.1017	-1.4323	-0.0078	0.0190	-0.4102	-0.0093	0.0103	-0.903
Systems Casino Data -0.0762 0.0340 -2.2416 -0.0025 0.0186 -0.1368 -0.0013 0.0105 -0.0013 Systems Digital -0.0852 0.0406 -2.0991 -0.0305 0.0284 -1.0733 0.0054 0.0139 Lightwave Lightwave -0.0305 0.0284 -1.0733 0.0054 0.0139	Inc.									
Casino Data Systems -0.0762 0.0340 -2.2416 -0.0025 0.0186 -0.1368 -0.0013 0.0105 -0.0105 Digital Lightwave -0.0852 0.0406 -2.0991 -0.0305 0.0284 -1.0733 0.0054 0.0139		-0.0253	0.0573	-0.4415	-0.0154	0.0211	-0./267	-0.0088	0.0097	-0.9100
Systems Digital -0.0852 0.0406 -2.0991 -0.0305 0.0284 -1.0733 0.0054 0.0139 Lightwave		0.5755	0.0015	0.5115	0.0005	0.0105	0.4000	0.0046	0.0405	0.400
Digital -0.0852 0.0406 -2.0991 -0.0305 0.0284 -1.0733 0.0054 0.0139 (-0.0762	0.0340	-2.2416	-0.0025	0.0186	-0.1368	-0.0013	0.0105	-0.1269
Lightwave		0.0000	0.0105	0.000	0.0005	0.0001	4 6705	0.0054	0.0400	0.000
	•	-0.0852	0.0406	-2.0991	-0.0305	0.0284	-1.0733	0.0054	0.0139	0.386
EVIDE COME 0.0526 0.0535 0.9823 0.0658 0.0365 1.8041 -0.0015 0.0134 -0.0015		0.0500	0.0505	0.0000	0.0050	0.000	1 0044	0.0045	0.0404	0.100
	Exide Corp			-						-0.109
Informix		-0.0121	0.0354	-0.3411	-0.0029	0.01/6	-0.1660	-0.0053	0.0100	-0.532

Table C.4

Results: Equation Two Retraction Period									
Company	l	(-1, +1)	-	(-5, +3)			(-20, +10)		
	Y_i	S.E. Y	S.E.	Y_i		Yi/S.E.	Yi	S.E.	Y _i /S.E.
Hills Stores	-0.0010	0.0083	-0.1159	-0.0098	0.0048	-2.0286	-0.0026	0.0028	-0.9461
IKON	0.0346	0.0236	1.4661	0.0106	0.0139	0.7599	-0.0008	0.0079	-0.0990
Itron, Inc.	-0.0158	0.0317	-0.4991	-0.0188	0.0185	-1.0148	0.0005	0.0106	0.0447
UCAR	0.0005	0.0166	0.0283	-0.0031	0.0096	-0.3182	-0.0112	0.0054	-2.0809
Goody's	0.0170	0.0274	0.6183	0.0110	0.0161	0.6850	0.0055	0.0092	0.6018
National	-0.0025	0.0281	-0.0887	0.0114	0.0164	0.6935	0.0016	0.0094	0.1747
Media Corp									
PerSeptive	0.0127	0.0361	0.3520	0.0087	0.0211	0.4113	0.0117	0.0121	0.9732
Biosystems									
Radius	0.0022	0.0246	0.0877	-0.0108	0.0143	-0.7557	0.0140	0.0081	1.7179
RasterOps	-0.0169	0.0357	-0.4733	0.0190	0.0208	0.9118	-0.0094	0.0119	-0.7900
Gensia	0.0044	0.0398	0.1113	0.0186	0.0234	0.7946	0.0012	0.0133	0.0901
DonnKenny	0.0877	0.0740	1.1862	0.0123	0.0434	0.2835	0.0008	0.0249	0.0339
Marcum	-0.0238	0.0238	-1.0006	-0.0059	0.0140	-0.4199	-0.0038	0.0080	-0.4719
Corp									
Porta	-0.0277	0.0467	-0.5939	0.0731	0.0271	2.6934	0.0027	0.0157	0.1696
Systems									
Medical	0.0194	0.0477	0.4064	0.0056	0.0280	0.1992	0.0092	0.0160	0.5775
Resources									
USX	0.0156	0.0108	1.4478	0.0014	0.0063	0.2181	0.0039	0.0036	1.0961
Applied	-0.0014	0.0213	-0.0657	0.0100	0.0125	0.8041	-0.0131	0.0070	-1.8700
Magnetics									
Compressio	0.0388	0.0211	1.8389	0.0100	0.0124	0.8067	0.0080	0.0071	1.1331
n Labs									
Employee	0.1360	0.0356	3.8247	0.0603	0.0211	2.8522	0.0227	0.0122	1.8512
Solutions									
Digital	0.0155	0.0280	0.5526	-0.0097	0.0164	-0.5928	-0.0036	0.0093	-0.3842
Systems									
Laserscope	-0.0305	0.0252	-1.2111	-0.0017	0.0148	-0.1128	-0.0093	0.0084	-1.1060
Immunex	0.0202	0.0222	0.9093	0.0025	0.0130	0.1934	-0.0016	0.0074	-0.2224
NeoRx	-0.0441	0.0361	-1.2224	0.0090	0.0212	0.4242	0.0016	0.0121	0.1363
PS Group	0.0454	0.0115	3.9609	0.0083	0.0069	1.1965	-0.0023	0.0040	-0.5812
SciMed Life	0.0161	0.0162	0.9895	0.0033	0.0095	0.3481	0.0070	0.0054	1.2901
Systems									
Anadigics	-0.0446	0.0302	-1.4762	-0.0151	0.0178	-0.8498	-0.0106	0.0102	-1.0419
Inc.									
Aura	0.0141	0.0296	0.4743	0.0115	0.0173	0.6670	-0.0079	0.0097	-0.8167
Systems									
Casino Data	-0.0359	0.0315	-1.1374	-0.0106	0.0186	-0.5698	-0.0019	0.0106	-0.1835
Systems									
Digital	-0.0850	0.0403	-2.1090	-0.0116	0.0240	-0.4845	0.0084	0.0137	0.6138
Lightwave									
Exide Corp	-0.0028	0.0385	-0.0722	0.0294	0.0225	1.3069	-0.0026	0.0129	-0.1991
Informix	-0.0121	0.0299	-0.4034	-0.0031	0.0175	-0.1751	-0.0054	0.0100	-0.5380
Corp									

Appendix D

Rule 23. Class Actions

(a) Prerequisites to a Class Action.

One or more members of a class may sue or be sued as representative parties on behalf of all only if

- (1) the class is so numerous that joinder of all members is impracticable,
- (2) there are questions of law or fact common to the class,
- (3) the claims or defenses of the representative parties are typical of the claims or defenses of the class, and
- (4) the representative parties will fairly and adequately protect the interests of the class.
- (b) Class Actions Maintainable.

An action may be maintained as a class action if the prerequisites of subdivision (a) are satisfied, and in addition:

- (1) the prosecution of separate actions by or against individual members of the class would create a risk of
 - (A) inconsistent or varying adjudications with respect to individual members of the class which would establish incompatible standards of conduct for the party opposing the class, or
 - (B) adjudications with respect to individual members of the class which would as a practical matter be dispositive of the interests of the other members not parties to the adjudications or substantially impair or impede their ability to protect their interests; or
- (2) the party opposing the class has acted or refused to act on grounds generally applicable to the class, thereby making appropriate final injunctive relief or corresponding declaratory relief with respect to the class as a whole; or

- (3) the court finds that the questions of law or fact common to the members of the class predominate over any questions affecting only individual members, and that a class action is superior to other available methods for the fair and efficient adjudication of the controversy. The matters pertinent to the findings include: (A) the interest of members of the class in individually controlling the prosecution or defense of separate actions; (B) the extent and nature of any litigation concerning the controversy already commenced by or against members of the class; (C) the desirability or undesirability of concentrating the litigation of the claims in the particular forum; (D) the difficulties likely to be encountered in the management of a class action.
- (c) Determination by Order Whether Class Action to be Maintained; Notice; Judgment; Actions Conducted Partially as Class Actions.
- (1) As soon as practicable after the commencement of an action brought as a class action, the court shall determine by order whether it is to be so maintained. An order under this subdivision may be conditional, and may be altered or amended before the decision on the merits.
- (2) In any class action maintained under subdivision (b)(3), the court shall direct to the members of the class the best notice practicable under the circumstances, including individual notice to all members who can be identified through reasonable effort. The notice shall advise each member that (A) the court will exclude the member from the class if the member so requests by a specified date; (B) the judgment, whether favorable or not, will include all members who do not request exclusion; and (C) any member who does not request exclusion may, if the member desires, enter an appearance through counsel.
- (3) The judgment in an action maintained as a class action under subdivision (b)(1) or (b)(2), whether or not favorable to the class, shall include and describe those whom the court finds to

be members of the class. The judgment in an action maintained as a class action under subdivision (b)(3), whether or not favorable to the class, shall include and specify or describe those to whom the notice provided in subdivision (c)(2) was directed, and who have not requested exclusion, and whom the court finds to be members of the class.

(4) When appropriate (A) an action may be brought or maintained as a class action with respect to particular issues, or (B) a class may be divided into subclasses and each subclass treated as a class, and the provisions of this rule shall then be construed and applied accordingly.

(d) Orders in Conduct of Actions.

In the conduct of actions to which this rule applies, the court may make appropriate orders: (1) determining the course of proceedings or prescribing measures to prevent undue repetition or complication in the presentation of evidence or argument; (2) requiring, for the protection of the members of the class or otherwise for the fair conduct of the action, that notice be given in such manner as the court may direct to some or all of the members of any step in the action, or of the proposed extent of the judgment, or of the opportunity of members to signify whether they consider the representation fair and adequate, to intervene and present claims or defenses, or otherwise to come into the action; (3) imposing conditions on the representative parties or on intervenors; (4) requiring that the pleadings be amended to eliminate therefrom allegations as to representation of absent persons, and that the action proceed accordingly; (5) dealing with similar procedural matters. The orders may be combined with an order under Rule 16, and may be altered or amended as may be desirable from time to time.

(e) Dismissal or Compromise.

A class action shall not be dismissed or compromised without the approval of the court, and notice of the proposed dismissal or compromise shall be given to all members of the class in such manner as the court directs.

(f) Appeals.

A court of appeals may in its discretion permit an appeal from an order of a district court granting or denying class action certification under this rule if application is made to it within ten days after entry of the order. An appeal does not stay proceedings in the district court unless the district judge or the court of appeals so orders.

RULE 23.1. DERIVATIVE ACTIONS BY SHAREHOLDERS

In a derivative action brought by one or more shareholders or members to enforce a right of a corporation or of an unincorporated association, the corporation or association having failed to enforce a right which may properly be asserted by it, the complaint shall be verified and shall allege (1) that the plaintiff was a shareholder or member at the time of the transaction of which the plaintiff complains or that the plaintiff's share or membership thereafter devolved on the plaintiff by operation of law, and (2) that the action is not a collusive one to confer jurisdiction on a court of the United States which it would not otherwise have. The complaint shall also allege with particularity the efforts, if any, made by the plaintiff to obtain the action the plaintiff desires from the directors or comparable authority and, if necessary, from the shareholders or members, and the reasons for the plaintiff's failure to obtain the action or for not making the effort. The derivative action may not be maintained if it appears that the plaintiff does not fairly and adequately represent the interests of the shareholders or members similarly situated in enforcing the right of the corporation or association. The action shall not be dismissed or compromised without the approval of the court, and notice of the proposed dismissal or compromise shall be given to shareholders or members in such manner as the court directs.

RULE 23.2. ACTIONS RELATING TO UNINCORPORATED ASSOCIATIONS

An action brought by or against the members of an unincorporated association as a class by naming certain members as representative parties may be maintained only if it appears that the

representative parties will fairly and adequately protect the interests of the association and its members. In the conduct of the action the court may make appropriate orders corresponding with those described in Rule 23(d), and the procedure for dismissal or compromise of the action shall correspond with that provided in Rule 23(e).

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⁴⁷ Author's note: In many cases, journal articles were available directly off the internet (Dow Jones Interactive, Lexis/Nexis). In the bulk of those cases, the page number noted in this dissertation will reflect the page number from the internet printout, which will likely NOT be the same as the published copy.

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